

EXHIBIT A

Joseph R. Saveri (State Bar No. 130064)
 Steven N. Williams (State Bar No. 175489)
 Cadio Zirpoli (State Bar No. 179108)
 Elissa A. Buchanan (State Bar No. 249996)
 Travis Manfredi (State Bar No. 281779)
JOSEPH SAVERI LAW FIRM, LLP
 601 California Street, Suite 1000
 San Francisco, California 94108
 Telephone: (415) 500-6800
 Facsimile: (415) 395-9940
 Email: jsaveri@saverilawfirm.com
 swilliams@saverilawfirm.com
 czirpoli@saverilawfirm.com
 eabuchanan@saverilawfirm.com
 tmanfredi@saverilawfirm.com

Matthew Butterick (State Bar No. 250953)
 1920 Hillhurst Avenue, #406
 Los Angeles, CA 90027
 Telephone: (323) 968-2632
 Facsimile: (415) 395-9940
 Email: mb@buttericklaw.com

*Counsel for Individual and Representative
 Plaintiffs and the Proposed Class*

**UNITED STATES DISTRICT COURT
 NORTHERN DISTRICT OF CALIFORNIA
 SAN FRANCISCO DIVISION**

J. DOE 3 and J. DOE 4, individually and on behalf of
 all others similarly situated,

Individual and Representative Plaintiffs,

v.

GITHUB, INC., a Delaware corporation;
 MICROSOFT CORPORATION, a Washington
 corporation; OPENAI, INC., a Delaware nonprofit
 corporation; OPENAI, L.P., a Delaware limited
 partnership; OPENAI GP, L.L.C., a Delaware limited
 liability company; OPENAI STARTUP FUND GP I,
 L.L.C., a Delaware limited liability company;
 OPENAI STARTUP FUND I, L.P., a Delaware
 limited partnership; OPENAI STARTUP FUND
 MANAGEMENT, LLC, a Delaware limited liability
 company,

Defendants.

Case No.

COMPLAINT

CLASS ACTION

DEMAND FOR JURY TRIAL

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Plaintiffs J. Doe 3 and J. Doe 4 (“Plaintiffs”), on behalf of themselves and all others similarly situated, bring this Class Action Complaint (the “Complaint”) against Defendants GitHub, Inc.; Microsoft Corporation; OpenAI, Inc.; OpenAI, L.P.; OpenAI GP, L.L.C.; OpenAI Startup Fund GP I, L.L.C.; OpenAI Startup Fund I, L.P.; and OpenAI Startup Fund Management, LLC¹ for violation of the Digital Millennium Copyright Act, 17 U.S.C. §§ 1201–1205 (the “DMCA”); violation of the Lanham Act, 15 U.S.C. § 1125; violation of Unfair Competition law, *Cal. Bus. & Prof. Code* §§ 17200, *et seq.*; violation of the California Consumer Privacy Act, *Cal. Civ. Code* § 1798.150 (the “CCPA”); and Breach of Contract regarding the Suggested Licenses, GitHub’s Privacy Statement, and GitHub’s Terms of Service, *Cal. Bus. & Prof. Code* §§ 22575–22579, *Cal. Civ. Code* § 1798.150. Plaintiffs and the Class also bring this Complaint against Defendants for their Tortious Interference in Plaintiffs’ Contractual Relationships; Fraud, and Negligence regarding handling of sensitive data.

I. OVERVIEW: A BRAVE NEW WORLD OF SOFTWARE PIRACY

1. Plaintiffs and the Class are owners of copyright interests in materials made available publicly on GitHub that are subject to various licenses containing conditions for use of those works (the “Licensed Materials.”). All the licenses at issue here (the “Licenses”) contain certain common terms (the “License Terms”).

2. “Artificial Intelligence” is referred to herein as “AI.” AI is defined for the purposes of this Complaint as a computer program that algorithmically simulates human reasoning or inference, often using statistical methods. Machine Learning (“ML”) is a subset of AI in which the behavior of the program is derived from studying a corpus of material called training data.

¹ GitHub, Inc. is referred to as “GitHub.” Microsoft Corporation is referred to as “Microsoft.” OpenAI, Inc.; OpenAI, L.P.; OpenAI GP, L.L.C.; OpenAI Startup Fund GP I, L.L.C.; OpenAI Startup Fund I, L.P.; and OpenAI Startup Fund Management, LLC are referred to collectively herein as “OpenAI.” Collectively, GitHub, Inc., Microsoft Corporation, OpenAI, Inc.; OpenAI, L.P.; OpenAI GP, L.L.C.; OpenAI Startup Fund GP I, L.L.C.; OpenAI Startup Fund I, L.P.; and OpenAI Startup Fund Management, LLC are referred to herein as “Defendants.”

1 3. GitHub is a company founded in 2008 by a team of open-source enthusiasts. At
2 the time, GitHub's stated goal was to support open-source development, especially by hosting
3 open-source source code on the website github.com. Over the next 10 years, GitHub, based on
4 these representations succeeded wildly, attracting nearly 25 million developers.

5 4. Developers published Licensed Materials on GitHub pursuant to written Licenses.
6 In particular, the most popular ones share a common term: use of the Licensed Materials requires
7 some form of *attribution*, usually by, among other things, including a copy of the license along
8 with the name and copyright notice of the original author.

9 5. On October 26, 2018, Microsoft acquired GitHub for \$7.5 billion. Though some
10 members of the open-source community were skeptical of this union, Microsoft repeated one
11 mantra throughout: "Microsoft Loves Open Source". For the first few years, Microsoft's
12 representations seemed credible.

13 6. Microsoft invested \$1 billion in OpenAI LP in July 2019 at a \$20 billion valuation.
14 In 2020, Microsoft became exclusive licensee of OpenAI's GPT-3 language model—despite
15 OpenAI's continued claims its products are meant to benefit "humanity" at large. In 2021,
16 Microsoft began offering GPT-3 through its Azure cloud-computing platform. On October 20,
17 2022, it was reported that OpenAI "is in advanced talks to raise more funding from Microsoft" at
18 that same \$20 billion valuation. Copilot runs on Microsoft's Azure platform. Microsoft has used
19 Copilot to promote Azure's processing power, particularly regarding AI.

20 7. On information and belief, Microsoft obtained a partial ownership interest in
21 OpenAI in exchange for its \$1 billion investment. As OpenAI's largest investor and largest
22 service provider—specifically in connection with Microsoft's Azure product—Microsoft exerts
23 considerable control over OpenAI.

24 8. In June 2021, GitHub and OpenAI launched Copilot, an AI-based product that
25 promises to assist software coders by providing or filling in blocks of code using AI. GitHub
26 charges Copilot users \$10 per month or \$100 per year for this service. Copilot ignores, violates,
27 and removes the Licenses offered by thousands—possibly millions—of software developers,
28 thereby accomplishing software piracy on an unprecedented scale. Copilot outputs text derived

from Plaintiffs' and the Class's Licensed Materials without adhering to the applicable License Terms and applicable laws. Copilot's output is referred herein as "Output."

9. On August 10, 2021, OpenAI debuted its Codex product, which converts natural language into code and is integrated into Copilot. (Copilot and Codex can be called either AIs or MLs. Herein they will be referred to as AIs unless a distinction is required.)

10. Though Defendants have been cagey about what data was used to train the AI,² they have conceded that the training data includes data in vast numbers of publicly accessible repositories on GitHub,³ which include and are limited by Licenses.

11. Among other things, Defendants stripped Plaintiffs' and the Class's attribution, copyright notice, and license terms from their code in violation of the Licenses and Plaintiffs' and the Class's rights. Defendants used Copilot to distribute the now-anonymized code to Copilot users as if it were created by Copilot.

12. Copilot is run entirely on Microsoft's Azure cloud-computing platform.

13. Copilot often simply reproduces code that can be traced back to open-source repositories or open-source licensees. Contrary to and in violation of the Licenses, code reproduced by Copilot *never* includes attributions to the underlying authors.

14. GitHub and OpenAI have offered shifting accounts of the source and amount of the code or other data used to train and operate Copilot. They have also offered shifting justifications for why a commercial AI product like Copilot should be exempt from these license requirements, often citing "fair use."

15. It is not fair, permitted, or justified. On the contrary, Copilot's goal is to replace a huge swath of open source by taking it and keeping it inside a GitHub-controlled paywall. It violates the licenses that open-source programmers chose and monetizes their code despite GitHub's pledge never to do so.

² "Training" an AI, as described in greater detail below, means feeding it large amounts of data that it interprets using given criteria. Feedback is then given to it to fine-tune its Output until it can provide Output with minimal errors.

³ Repositories are containers for individual coding projects. They are where GitHub users upload their code and where other users can find it. Most GitHub users have multiple repositories.

II. JURISDICTION AND VENUE

16. Plaintiffs bring this action on their own behalf as well as representatives of a Class of similarly situated individuals and entities. They seek to recover injunctive relief and damages as a result and consequence of Defendants' unlawful conduct.

17. Jurisdiction and venue are proper in this judicial district pursuant to Defendants' violation of the Digital Millennium Copyright Act, 17 U.S.C. §§ 1201–1205 (the "DMCA"); Reverse Passing Off, Unjust Enrichment, and Unfair Competition under the Lanham Act, 15 U.S.C. § 1125; and because a substantial part of the events giving rise to Plaintiff's claims occurred in this District, a substantial portion of the affected interstate trade and commerce was carried out in this District, and three or more of the Defendants reside in this District and/or are licensed to do business in this District. Each Defendant has transacted business, maintained substantial contacts, and/or committed overt acts in furtherance of the illegal scheme and conspiracy throughout the United States, including in this District. Defendants' conduct has had the intended and foreseeable effect of causing injury to persons residing in, located in, or doing business throughout the United States, including in this District.

III. INTRADISTRICT ASSIGNMENT

18. Pursuant to Civil Local Rule 3.2 (c) and (e), assignment of this case to the San Francisco Division of the United States District Court for the Northern District of California is proper because a substantial amount of the development of the Copilot product as well as of the interstate trade and commerce involved and affected by Defendants' conduct giving rise to the claims herein occurred in this Division. Furthermore, Defendants GitHub and all the OpenAI entities are headquartered within this Division.

IV. PARTIES

PLAINTIFFS

19. Plaintiff J. Doe 3 is a resident of the State of Idaho. Plaintiff Doe 3 published Licensed Materials they owned a copyright interest in to at least one GitHub repository under one of the Suggested Licenses. Specifically, Doe 3 has published Licensed Materials they claim a copyright interest in under the following Suggested Licenses: GNU Affero General Public

1 License version 3. Plaintiff was, and continues to be, injured during the Class Period as a result of
 2 Defendants' unlawful conduct alleged herein.

3 20. Plaintiff J. Doe 4 is a resident of the State of South Carolina. Plaintiff Doe 4
 4 published Licensed Materials they owned a copyright interest in to at least one GitHub repository
 5 under one of the Suggested Licenses. Specifically, Doe 4 has published Licensed Materials they
 6 claim a copyright interest in under the following Suggested Licenses: GNU General Public
 7 License v2.0 and GNU General Public License v3.0. Plaintiff was, and continues to be, injured
 8 during the Class Period as a result of Defendants' unlawful conduct alleged herein.

9 **DEFENDANTS**

10 21. Defendant GitHub, Inc. is a Delaware corporation with its principal place of
 11 business located at 88 Colin P Kelly Jr Street, San Francisco, CA 94107. GitHub sells, markets,
 12 and distributes Copilot throughout the internet and other sales channels throughout the United
 13 States, including in this District. GitHub released Copilot on a limited "technical preview" basis
 14 on June 29, 2021. On June 21, 2022, Copilot was released to the public as a subscription-based
 15 service for individual developers. GitHub is a party to the unlawful conduct alleged herein.

16 22. Defendant Microsoft Corporation is a Washington corporation with its principal
 17 place of business located at One Microsoft Way, Redmond, Washington 98052. Microsoft
 18 announced its acquisition of Defendant GitHub, Inc. on June 4, 2018. On October 26, 2018,
 19 Microsoft finalized its acquisition of GitHub. Microsoft owns and operates GitHub. Through its
 20 corporate ownership, control of the GitHub Board of Directors, active management, and other
 21 means, Microsoft sells, markets, and distributes Copilot. Microsoft is a party to the unlawful
 22 conduct alleged herein.

23 23. Defendant OpenAI, Inc. is a Delaware nonprofit corporation with its principal
 24 place of business located at 3180 18th Street, San Francisco, CA 94110. OpenAI, Inc. is a party to
 25 the unlawful conduct alleged herein. It—along with OpenAI, L.P.—programed, trained, and
 26 maintains Codex, which infringes all the same rights at Copilot and is also an integral piece of
 27 Copilot. Copilot requires Codex to function. OpenAI, Inc. is a party to the unlawful conduct
 28

1 alleged herein. OpenAI, Inc. founded, owns, and exercises control over all the other OpenAI
2 entities, including those set forth in Paragraphs 24–28.

3 24. Defendant OpenAI, L.P. is a Delaware limited partnership with its principal place
4 of business located at 3180 18th Street, San Francisco, CA 94110. OpenAI, L.P. is a party to the
5 unlawful conduct alleged herein. Its primary activity is research and technology. OpenAI, L.P. is a
6 wholly owned subsidiary of OpenAI, Inc. that is operated for profit. OpenAI, L.P. is the OpenAI
7 entity that co-created Copilot and offers it jointly with GitHub. OpenAI’s revenue, including
8 revenue from Copilot, is received by OpenAI, L.P. OpenAI, Inc. controls OpenAI, L.P. directly
9 and through the other OpenAI entities.

10 25. Defendant OpenAI GP, L.L.C. (“OpenAI GP”) is a Delaware limited liability
11 company with its principal place of business located at 3180 18th Street, San Francisco, CA
12 94110. OpenAI GP is the general partner of OpenAI, L.P. OpenAI GP manages and operates the
13 day-to-day business and affairs of OpenAI, L.P. OpenAI GP is liable for the debts, liabilities and
14 obligations of OpenAI, L.P., including litigation and judgments. OpenAI GP is a party to the
15 unlawful conduct alleged herein. Its primary activity is research and technology. OpenAI GP is
16 the general partner of OpenAI, L.P. OpenAI GP was aware of the unlawful conduct alleged herein
17 and exercised control over OpenAI, L.P. throughout the Class Period. OpenAI, Inc. directly
18 controls OpenAI GP.

19 26. Defendant OpenAI Startup Fund I, L.P. (“OpenAI Startup Fund I”) is a Delaware
20 limited partnership with its principal place of business located at 3180 18th Street, San Francisco,
21 CA 94110. OpenAI Startup Fund I was instrumental in the foundation of OpenAI, L.P., including
22 the creation of its business strategy and providing initial funding. Through participation in
23 OpenAI Startup Fund I, certain entities and individuals obtained an ownership interest in
24 OpenAI, L.P. Plaintiffs are informed and believed, and on that basis allege that OpenAI Startup
25 Fund I participated in the organization and operation of OpenAI, L.P. OpenAI Startup Fund I is a
26 party to the unlawful conduct alleged herein. OpenAI Startup Fund I was aware of the unlawful
27 conduct alleged herein and exercised control over OpenAI, L.P. throughout the Class Period.
28

27. Defendant OpenAI Startup Fund GP I, L.L.C. (“OpenAI Startup Fund GP I”) is a Delaware limited liability company with its principal place of business located at 3180 18th Street, San Francisco, CA 94110. OpenAI Startup Fund GP I is the general partner of OpenAI Startup Fund I. OpenAI Startup Fund GP I manages and operates the day-to-day business and affairs of OpenAI Startup Fund I. OpenAI Startup Fund GP I is liable for the debts, liabilities and obligations of OpenAI Startup Fund I, including litigation and judgments. OpenAI Startup Fund GP I was aware of the unlawful conduct alleged herein and exercised control over OpenAI, L.P. throughout the Class Period. OpenAI Startup Fund GP I is a party to the unlawful conduct alleged herein. Sam Altman, co-founder, CEO, and Board member of OpenAI, Inc. is the Manager of OpenAI Startup Fund GP I. OpenAI Startup Fund GP I is the General Partner of OpenAI Startup Fund I, L.P.

28. Defendant OpenAI Startup Fund Management, LLC (“OpenAI Startup Fund Management”) is a Delaware limited liability company with its principal place of business located at 3180 18th Street, San Francisco, CA 94110. OpenAI Startup Fund Management is a party to the unlawful conduct alleged herein. OpenAI Startup Fund Management was aware of the unlawful conduct alleged herein and exercised control over OpenAI, L.P. throughout the Class Period.

V. AGENTS AND CO-CONSPIRATORS

29. The unlawful acts alleged against the Defendants in this class action complaint were authorized, ordered, or performed by the Defendants’ respective officers, agents, employees, representatives, or shareholders while actively engaged in the management, direction, or control of the Defendants’ businesses or affairs.

30. The Defendants’ agents operated under the explicit and apparent authority of their principals.

31. Each Defendant, and its subsidiaries, affiliates and agents operated as a single unified entity.

32. Various persons and/or firms not named as Defendants herein may have participated as coconspirators in the violations alleged herein and may have performed acts and made statements in furtherance thereof.

33. Each acted as the principal, agent, or joint venture of, or for other Defendants with respect to the acts, violations, and common course of conduct alleged herein.

VI. CLASS ALLEGATIONS

A. Class Definitions

34. Plaintiffs bring this action for damages and injunctive relief on behalf of themselves and all others similarly situated as a class action pursuant to Rules 23(a), 23(b)(2), and 23(b)(3) of the Federal Rules of Civil Procedure, on behalf of the following Classes:

“Injunctive Relief Class” under Rule 23(b)(2):

All persons or entities domiciled in the United States that, (1) owned an interest in at least one US copyright in any work; (2) offered that work under one of GitHub’s Suggested Licenses⁴; and (3) stored Licensed Materials in any public GitHub repositories at any time between January 1, 2015 and the present (the “Class Period”).

⁴ When a GitHub user creates a new repository, they have the option of selecting one of thirteen licenses from a dropdown menu to apply to the contents of that repository. (They can also apply a different license later, or no license.) The Creative Commons Zero v1.0 Universal and the Unlicense donate the covered work to the public domain and/or otherwise waive all copyrights and related rights. Because they do not contain the necessary provisions nor do they even allow the owner to make copyright claims in most circumstances, they are not included in the Class Definition. We refer to the remaining eleven options as the “Suggested Licenses,” which are: (1) Apache License 2.0 (“Apache 2.0”); (2) GNU General Public License version 3 (“GPL-3.0”); (3) MIT License (“MIT”); (4) The 2-Clause BSD License (“BSD 2”); (5) The 3-Clause BSD License (“BSD 3”); (6) Boost Software License (“BSL-1.0”); (7) Eclipse Public License 2.0 (“EPL-2.0”); (8) GNU Affero General Public License version 3 (“AGPL-3.0”); (9) GNU General Public License version 2 (“GPL-2.0”); (10) GNU Lesser General Public License version 2.1 (“LGPL-2.1”); and (11) Mozilla Public License 2.0 (“MPL-2.0”). These Suggested Licenses each contain at least three common requirements for use of the Licensed Materials in a derivative work or copy: attribution to the owner of the Licensed Materials (“Attribution”), inclusion of a copyright notice (“Copyright Notice”), and inclusion of the applicable Suggested License’s text (“License Terms”).

“Damages Class” under Rule 23(b)(3):

All persons or entities domiciled in the United States that, (1) owned an interest in at least one US copyright in any work; (2) offered that work under one of GitHub’s Suggested Licenses; and (3) stored Licensed Materials in any public GitHub repositories at any time during the Class Period.

These “Class Definitions” specifically exclude the following person or entities:

- a. Any of the Defendants named herein;
- b. Any of the Defendants’ co-conspirators;
- c. Any of Defendants’ parent companies, subsidiaries, and affiliates;
- d. Any of Defendants’ officers, directors, management, employees, subsidiaries, affiliates, or agents;
- e. All governmental entities; and
- f. The judges and chambers staff in this case, as well as any members of their immediate families.

B. Numerosity

35. Plaintiffs do not know the exact number of Class members, because such information is in the exclusive control of Defendants. Plaintiffs are informed and believe that there are at least thousands of Class members geographically dispersed throughout the United States such that joinder of all Class members in the prosecution of this action is impracticable.

C. Typicality

36. Plaintiffs’ claims are typical of the claims of their fellow Class members because Plaintiffs and Class members all own code published under a License. Plaintiffs and the Class published work subject to a License to GitHub later used by Copilot. Plaintiffs and absent Class members were damaged by this and other wrongful conduct of Defendants as alleged herein. Damages and the other relief sought herein is common to all members of the Class.

D. Commonality & Predominance

37. Numerous questions of law or fact common to the entire Class arise from Defendants’ conduct—including, but not limited to those identified below:

1 **1. DMCA Violations**

- 2 • Whether Defendants’ conduct violated the Class’s rights under the DMCA
- 3 when GitHub and OpenAI caused Codex and Copilot to ingest and distribute
- 4 Licensed Materials without including any associated Attribution, Copyright
- 5 Notice, or License Terms.

6 **2. Contract-Related Conduct**

- 7 • Whether Defendants violated the Licenses governing use of the Licensed
- 8 Materials by using them to train Copilot and for republishing those materials
- 9 without appending the required Attribution, Copyright Notice, or License
- 10 Terms.
- 11 • Whether Defendants interfered in contractual relations between the Class and
- 12 the public regarding the Licensed Materials by concealing the License Terms.
- 13 • Whether GitHub committed Fraud when it promised not to sell or distribute
- 14 Licensed Materials outside GitHub in the GitHub Terms of Service and
- 15 Privacy Statement.

16 **3. Unlawful-Competition Conduct**

- 17 • Whether Defendants passed-off the Licensed Materials as its own creation
- 18 and/or Copilot’s creation.
- 19 • Whether Defendants were unjustly enriched by the unlawful conduct alleged
- 20 herein.
- 21 • Whether Defendants Copilot-related conduct constitutes Unfair Competition
- 22 under California law.

23 **4. Privacy Violations**

- 24 • Whether GitHub violated the Class’s rights under the California Consumer
- 25 Privacy Act (“CCPA”), the GitHub Privacy Statement, and/or the California
- 26 Constitution by, *inter alia*, sharing the Class’s sensitive personal information
- 27 (or, in the alternative, by not addressing an ongoing data breach of which it is
- 28 aware); creating a product that contains personal data GitHub cannot delete,

alter, nor share with the applicable Class member; and selling the Class's personal data.

- Whether GitHub committed Negligence when it failed to stop a still-ongoing data breach it was and continues to be aware of.

5. Injunctive Relief

- Whether this Court should enjoin Defendants from engaging in the unlawful conduct alleged herein. And what the scope of that injunction would be.

6. Defenses

- Whether any affirmative defense excuses Defendants' conduct.
- Whether any statutes of limitation limit Plaintiffs' and the Class's potential for recovery.
- Whether any applicable statutes of limitation should be tolled as a result of Defendants' fraudulent concealment of their unlawful conduct.

38. These and other questions of law and fact are common to the Class and predominate over any questions affecting the Class members individually.

E. Adequacy

39. Plaintiffs will fairly and adequately represent the interests of the Class because they have experienced the same harms as the Class and have no conflicts with any other members of the Class. Furthermore, Plaintiffs have retained sophisticated and competent counsel ("Class Counsel") who are experienced in prosecuting Federal and state class actions throughout the United States and other complex litigation and have extensive experience advising clients and litigating intellectual property, competition, contract, and privacy matters.

F. Other Class Considerations

40. Defendants have acted on grounds generally applicable to the Class, thereby making final injunctive relief appropriate with respect to the Class as a whole.

41. This class action is superior to alternatives, if any, for the fair and efficient adjudication of this controversy. Prosecuting the claims pleaded herein as a class action will

eliminate the possibility of repetitive litigation. There will be no material difficulty in the management of this action as a class action.

42. The prosecution of separate actions by individual Class members would create the risk of inconsistent or varying adjudications, establishing incompatible standards of conduct for Defendants.

VII. FACTUAL ALLEGATIONS

A. Introduction

43. This class action against Defendants concerns an OpenAI product called Codex and a GitHub product called Copilot.

44. OpenAI began development of Codex sometime after OpenAI was founded in December 2015 and released Codex on a limited basis in August 2021.

45. GitHub began development of Copilot sometime in 2019, released it on a limited basis in June 2021, and released it as a paid subscription service in June 2022.

46. Codex and Copilot are assistive AI-based systems offered to software programmers. These AI systems are each trained on a large corpus of publicly accessible software code and other materials, including all the Licensed Materials. Defendants describe these products as making coding easier by accepting a code “prompt” from a programmer and emitting a possible completion of that code, which is referred to herein as Output, as set forth above. Defendants claim Codex and Copilot do not retain copies of the materials they are trained on. In practice, however, the Output is often a near-identical reproduction of code from the training data.

47. Codex and Copilot are related. Copilot is a joint venture between GitHub and OpenAI. Codex is a standalone product released by OpenAI that also “powers GitHub Copilot, which [OpenAI] built and launched in partnership with GitHub.”⁵ “GitHub Copilot uses the OpenAI Codex to suggest code and entire functions in real-time, right from your editor.”⁶ The

⁵ See <https://openai.com/blog/openai-codex/>.

⁶ See <https://github.com/features/copilot/>.

version of Codex used to power Copilot is modified from OpenAI's standalone version. Defendants have kept secret the details of Codex's modifications and its integration into or interaction with Copilot.

B. Codex Outputs Copyrighted Materials Without Following the Terms of the Applicable Licenses

48. Below is an explanation of how Codex functions. When Codex is prompted with:

```
function isEven(n) {
```

it assumes this is the beginning of a function written in the JavaScript language that will test whether a number is even.

```
    ///
```

```
    ///
```

```
    ///
```

49. Based on this assumption, Codex will then provide Output meant to complete the rest of the function. Based on the given prompt, it produced the following response:⁷

```
function isEven(n) {
  if (n == 0)
    return true;
  else if (n == 1)
    return false;
  else if (n < 0)
    return isEven(-n);
  else
    return isEven(n - 2);
}
console.log(isEven(50));
// → true
console.log(isEven(75));
// → false
console.log(isEven(-1));
// → ??
```

50. The function itself occupies the first ten lines. Six additional lines follow the function, beginning with “console.log(isEven(50))”. On possible explanation for Codex’s inclusion of these lines is to test the “isEven” function. Though not part of the function itself, the lines will confirm the function works for certain values. In this case, the code implies that “isEven(50)” should return the value “true”, and “isEven(75)” should return “false”. Those answers are correct.

⁷ Due to the nature of Codex, Copilot, and AI in general, Plaintiffs cannot be certain these examples would produce the same results if attempted following additional trainings of Codex and/or Copilot. However, these examples are representative of Codex and Copilot’s Output at the time just prior to the filing of this Complaint.

51. The penultimate line indicates “`isEven(-1)`” should return “??”. This is an error, as “`isEven(-1)`” should return “`false`”.

52. Codex cannot and does not understand the meaning of software code or any other Licensed Materials. But in training, what became Codex was exposed to an enormous amount of existing software code (its “Training Data”) and—with input from its trainers and its own internal processes—inferred certain statistical patterns governing the structure of code and other Licensed Materials. The finished version of Codex, once trained, is known as a “Model.”

53. When given a prompt, such as the initial prompt discussed above—“`function isEven(n) {`”—Codex identifies the most statistically likely completion, based on the examples it reviewed in training. Every instance of Output from Codex is derived from material in its Training Data. Most of its Training Data consisted of Licensed Materials.

54. Codex does not “write” code the way a human would, because it does not understand the meaning of code. Codex’s lack of understanding of code is evidenced when it emits extra code that is not relevant under the circumstances. Here, Codex was only prompted to produce a function called “`isEven`”. To produce its answer, Codex relied on Training Data that also appended the extra testing lines. Having encountered this function and the follow-up lines together frequently, Codex extrapolates they are all part of one function. A human with even a basic understanding of how JavaScript works would know the extra lines aren’t part of the function itself.

55. Beyond the superfluous and inaccurate extra lines, this “`isEven`” function also contains two major defects. First, it assumes the variable “`n`” holds an integer. It could contain some other kind of value, like a decimal number or text string, which would cause an error. Second, even if “`n`” does hold an integer, the function will trigger a memory error called a “stack overflow” for sufficiently large integers. For these reasons, experienced programmers would not use Codex’s Output.

56. Codex does not identify the owner of the copyright to this Output, nor any other—it has not been trained to provide Attribution. Nor does it include a Copyright Notice nor any License Terms attached to the Output. This is by design—Codex was not coded or trained to

track or reproduce such data. The Output in the example above is taken from *Eloquent Javascript* by Marijn Haverbeke.⁸

57. Here is the exercise from *Eloquent Javascript*:

```
// Your code here.

console.log(isEven(50));
// → true
console.log(isEven(75));
// → false
console.log(isEven(-1));
// → ??
```

58. The exercise includes the “??” error. However, for Haverbeke’s purposes, this is not an error but a placeholder value for the reader to fill in. Codex—as a mere probabilistic model—fails to recognize this nuance. The inclusion of the double question marks confirms unequivocally that Codex took this code directly from a copyrighted source without following any of the attendant License Terms.

59. Haverbeke provides the following solution to the function discussed above:

```
function isEven(n) {
  if (n == 0) return true;
  else if (n == 1) return false;
  else if (n < 0) return isEven(-n);
  else return isEven(n - 2);
}

console.log(isEven(50));
```

⁸ <https://eloquentjavascript.net/code/#3.2>. *Eloquent Javascript* is “Licensed under a Creative Commons [A]tribution-[N]oncommercial license. All code in this book may also be considered licensed under an MIT license.” See <https://eloquentjavascript.net/>. Thus, having also been posted on GitHub, the code Codex relied on meets the definition of Licensed Materials.

```

1      // → true
2      console.log(isEven(75));
3      // → false
4      console.log(isEven(-1));
5      // → false

```

60. Aside from different line breaks—which are not semantically meaningful in JavaScript—this code for the function “isEven” is the same as what Codex produced. The tests are also the same, though in this case Haverbeke provides the right answer for “isEven(-1)”, which is “false”. Codex has reproduced Haverbeke’s Licensed Material almost verbatim, with the only difference being drawn from a different portion of those same Licensed Materials.

61. There are many copies of Haverbeke’s code stored in public repositories on GitHub, where programmers who are working through Haverbeke’s book store their answers.

62. The MIT license provides that “The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.”⁹ Any person taking this code directly from *Eloquent JavaScript* would have direct access to these License Terms and know to follow them if incorporating the Licensed Materials into a derivative work and/or copying them. Codex does not provide these License Terms.

63. OpenAI Codex’s Output would frequently, perhaps even constantly, contain Licensed Materials, i.e., it would have conditions associated with it through its associated license. In its 2021 research paper about Codex called “Evaluating Large Language Models Trained on Code,” OpenAI stated Codex’s Output is “often incorrect” and can contain security vulnerabilities and other “misalignments” (meaning, departures from what the user requested).

64. Most open-source licenses require attribution of the author, notice of their copyright, and a copy of the license specifically to ensure that future coders can easily credit all previous authors and ensure they adhere to all applicable licenses. All the Suggested Licenses include these requirements.

⁹ See Appendix A for full text of the MIT License.

65. Ultimately, Codex derives its value primarily from its ability to locate and output potentially useful Licensed Materials. And from its obfuscation of any rights associated with those materials.

C. Copilot Outputs Copyrighted Materials Without Following the Terms of the Applicable Licenses

66. GitHub Copilot works in a similar way to OpenAI Codex. As mentioned above, a modified version of Codex is used as the engine that powers Copilot.

67. Copilot is installed by the end user as an extension to various code editors, including Microsoft's Visual Studio and VS Code. As the user types into the editor, their code is uploaded in real time to Microsoft's Azure cloud platform, where they become prompts for Copilot.

68. When we give Copilot the same prompt discussed above in Paragraph 48, "function isEven(n) {", it interprets the prompt as the beginning of a function written in the JavaScript language that will test whether a number is even, same as Codex.

69. However, the Output of Copilot in response to the prompt is different than Codex, namely:

```
function isEven(n) {
    return n % 2 === 0;
}
```

70. This function is much closer to what a human programmer might use as compared to Codex's older, inaccurate offering. It handles all values and types of "n" correctly. It does not cause a stack overflow for larger values of "n" like the Codex Output.

71. Copilot's Output, like Codex's, is derived from existing code. Namely, sample code that appears in the online book *Mastering JS*, written by Valeri Karpov.¹⁰ Like Codex's Output, Copilot's is also based upon copyrighted educational material. *Mastering JS* is a set of educational exercises for programmers. Like *Eloquent Javascript*, there are many copies of

¹⁰ <https://masteringjs.io/tutorials/fundamentals/modulus/>.

1 Karpov’s exercise stored in public repositories on GitHub. Programmers working through
 2 *Mastering JS* store their answers there.

3 72. If Copilot is prompted with the name of a function that will test whether a number
 4 is prime (that is, a number that can only be evenly divided by 1 and itself), namely “function
 5 isPrime(n) {”, it returns:

```
6     function isPrime(n) {
7         if (n < 2) {
8             return false;
9         }
10        for (let i = 2; i < n; i++) {
11            if (n % i === 0) {
12                return false;
13            }
14        }
15        return true;
16    }
```

17 73. Though this function will work, it contains an error often made by beginner
 18 programmers that makes it much slower than it could be. Namely, the loop in the middle, which
 19 checks possible divisors, does not need to check every divisor smaller than “n,” only the divisors
 20 smaller than the square root of “n”. As with Codex, Copilot has no understanding of how the
 21 code works. It knows that more functions called “isPrime” contain the portion that checks for
 22 all divisors smaller than “n”, so that is what it offers. It does not return what it “thinks” is best, it
 23 returns what it has seen *the most*. It is not writing, it is reproducing (i.e., copying).

24 74. Like the other examples above—and most of Copilot’s Output—this output is
 25 nearly a verbatim copy of copyrighted code. In this case, it is substantially similar to the
 26 “isPrime” function in the book *Think JavaScript* by Matthew X. Curinga et al,¹¹ which is:

28 ¹¹ <https://matt.curinga.com/think-js/#solving-problems-with-for-loops>.

```

1      function isPrime(n) {
2          if (n < 2) {
3              return false;
4          }
5          for (let i = 2; i < n; i++) {
6              if (n % i === 0) {
7                  return false;
8              }
9          }
10         return true;
11     }

```

75. As with the other examples above, the source of Copilot's Output is a programming textbook. Also like the books the other examples were taken from, there are many copies of Curinga's code stored in public repositories on GitHub where programmers who are working through Curinga's book keep copies of their answers.

76. The material in Curinga's book is made available under the GNU Free Documentation License. Although this is not one of the Suggested Licenses, it contains similar attribution provisions, namely that "You may copy and distribute the Document in any medium, either commercially or noncommercially, provided that this License, the copyright notices, and the license notice saying this License applies to the Document are reproduced in all copies, and that you add no other conditions whatsoever to those of this License."¹²

77. As with Codex, Copilot does not provide the end user any attribution of the original author of the code, nor anything about their license requirements. There is no way for the Copilot user to know that they must provide attribution, copyright notice, nor a copy of the license's text. And with regard to the GNU Free Documentation License, Copilot users would not be aware that they are limited in what conditions they can place on the use of derivative works

¹² <https://matt.curinga.com/think-js/#gnu-free-documentation-license>.

1 they make using this copyrighted code. Had the Copilot user found this code in a public GitHub
2 repository or a copy of the book it was originally published in, they would find the GNU Free
3 Documentation License at the same time and be aware of its terms. Copilot finds that code for the
4 user but excises the license terms, copyright notice, and attribution. This practice allows its users
5 to assume that the code can be used without restriction. It cannot.

6 **D. Codex and Copilot Were Trained on Copyrighted Materials Offered Under Licenses**

7 78. Codex is an AI system. Another way to describe it is a “model.” Without Codex,
8 Copilot, or another AI-code-lookup-tool, code is written both by originating code from the
9 writer’s own knowledge of how to write code as well as by finding pre-written portions of code
10 that—under the terms of the applicable license—may be incorporated into the coding project.

11 79. Unlike a human programmer that has learned how code works and notices when
12 code it is copying has attached license terms, a copyright notice, and/or attribution, Codex and
13 Copilot were developed by feeding a corpus of material, called “training data,” into them. These
14 AI programs ingest all the data and, through a complex probabilistic process, predict what the
15 most likely solution to a given prompt a user would input is. Though more complicated in
16 practice, essentially Copilot returns the solution it has found in the most projects when those
17 projects are somehow weighted to adjust for whatever variables Codex or Copilot have identified
18 as relevant.

19 80. Codex and Copilot were not programmed to treat attribution, copyright notices,
20 and license terms as legally essential. Defendants made a deliberate choice to expedite the release
21 of Copilot rather than ensure it would not provide unlawful Output.

22 81. The words “study” and “training” and “learning” in connection with AI describe
23 algorithmic processes that are not analogous to human reasoning. An AI models cannot “learn”
24 as humans do, nor can it “understand” semantics and context the way humans do. Rather, it
25 detects statistically significant patterns in its training data and provides Output derived from its
26 training data when statistically appropriate. A “brute force” approach like this would not be
27 efficient nor even possible for humans. A human could not memorize, statistically analyze, and
28 easily access thousands of gigabytes of existing code, a task now possible for powerful computers

1 like those that make up Microsoft’s Azure cloud platform. To accomplish the same task, a human
2 may search for Licensed Materials that serve their purpose if they believe such materials exist.
3 And if that human finds such materials, they will probably abide by its License Terms rather than
4 risk infringing its owners’ rights. At the very least, if they incorporate those Licensed Materials
5 into their own project without following its terms they will be doing so knowingly.

6 **E. Copilot Was Launched Despite Its Propensity for Producing Unlawful Outputs**

7 82. GitHub and OpenAI have not provided much detail regarding what data Codex
8 and OpenAI were trained on. Plaintiffs know for certain from GitHub and OpenAI’s statements,
9 that both systems were trained on publicly available GitHub repositories, with Copilot having
10 been trained on all available public GitHub repositories. Thus, if Licensed Materials have been
11 posted to a GitHub public repository, Plaintiffs and the Class can be reasonably certain it was
12 ingested by Copilot and is sometimes returned to users as Output.

13 83. According to OpenAI, Codex was trained on “billions of lines of source code from
14 publicly available sources, including code in public GitHub repositories”. Similarly, GitHub has
15 described¹³ Copilot’s training material as “billions of lines of public code.” GitHub researcher
16 Eddie Aftandilian confirmed in a recent podcast¹⁴ that Copilot is “train[ed] on public repos on
17 GitHub.”

18 84. In a recent customer-support message, GitHub’s support department clarified
19 certain facts about training Copilot. First, GitHub said that “training for Codex (the model used
20 by Copilot) is done by OpenAI, not GitHub.” Second, in its support message, GitHub put
21 forward a more detailed justification for its use of copyrighted code as training data:

27 ¹³ <https://github.blog/2021-06-30-github-copilot-research-recitation/>.

28 ¹⁴ <https://www.se-radio.net/2022/10/episode-533-eddie-aftandilian-on-github-copilot/>.

Training machine learning models on publicly available data is considered fair use across the machine learning community . . . OpenAI’s training of Codex is done in accordance with global copyright laws which permit the use of publicly accessible materials for computational analysis and training of machine learning models, and do not require consent of the owner of such materials. Such laws are intended to benefit society by enabling machines to learn and understand using copyrighted works, much as humans have done throughout history, and to ensure public benefit, these rights cannot generally be restricted by owners who have chosen to make their materials publicly accessible.

The claim that training ML models on publicly available code is widely accepted as fair use is not true. And regardless of this concept’s level of acceptance in “the machine learning community,” under Federal law, it is illegal.

85. Former GitHub CEO Nat Friedman said in June 2021—when Copilot was released to a limited number of customers—that “training ML systems on public data is fair use.”¹⁵ Friedman’s statement is pure speculation; no Court has considered the question of whether “training ML systems on public data is fair use.” The Fair Use affirmative defense is only applicable to Section 501 copyright infringement. It is not a defense to violations of the DMCA, Breach of Contract, nor any other claim alleged herein. It cannot be used to avoid liability here. At the same time Friedman asserted “the output [of Copilot] belongs to the operator.”

86. Other open-source stakeholders have made this point already. For example, in June 2021, Software Freedom Conservancy (“SFC”), a prominent open-source advocacy organization, asked Microsoft and GitHub to provide “legal references for GitHub’s public legal positions.” No references were provided by any of the Defendants.¹⁶

87. Beyond the examples above, Copilot regularly Output’s verbatim copies of Licensed Materials. For example, Copilot reproduced verbatim well-known code from the game Quake III, use of which is governed by one of the Suggested Licenses—GPL-2.¹⁷

¹⁵ <https://twitter.com/natfriedman/status/1409914420579344385/>.

¹⁶ <https://sfconservancy.org/blog/2022/feb/03/github-copilot-copyleft-gpl/>.

¹⁷ <https://twitter.com/stefankarpinski/status/1410971061181681674/>.

1 88. Copilot also reproduced code that had been released under a license that allowed
 2 its use only for free games and required attribution by including a copy of the license. Copilot did
 3 not mention nor include the underlying license when providing a copy of this code as Output.¹⁸

4 89. Texas A&M computer-science professor Tim Davis has provided numerous
 5 examples of Copilot reproducing code belonging to him without its license or attribution.¹⁹

6 90. GitHub concedes that in ordinary use, Copilot will reproduce passages of code
 7 verbatim: “Our latest internal research shows that about 1% of the time, a suggestion [Output]
 8 may contain some code snippets longer than ~150 characters that matches” code from the
 9 training data. This standard is more limited than is necessary for copyright infringement. But
 10 even using GitHub’s own metric and the most conservative possible criteria, Copilot has violated
 11 the DMCA at least tens of thousands of times.

12 91. In June 2022, Copilot had 1,200,000 users. If only 1% of users have ever received
 13 Output based on Licensed Materials and only once each, Defendants have “only” breached
 14 Plaintiffs’ and the Class’s Licenses 12,000 times. However, each time Copilot outputs Licensed
 15 Materials without attribution, the copyright notice, or the License Terms it violates the DMCA
 16 three times. Thus, even using this extreme underestimate, Copilot has “only” violated the
 17 DMCA 36,000 times.²⁰ Because Copilot constantly Outputs code as a user writes, and because
 18 nearly all of Copilot’s training data was Licensed Material, this number is most likely
 19 exponentially lower than the true number of breaches and DMCA violations.

24 ¹⁸ <https://twitter.com/ChrisGr93091552/status/1539731632931803137/>.

25 ¹⁹ <https://twitter.com/DocSparse/status/1581461734665367554/>.

26 ²⁰ These violations of Section 1202 of the DMCA each incur statutory damages of “not less than
 27 \$2,500 or more than \$25,000.” 17 U.S.C. § 1203(c)(3)(B). This extremely conservative estimate
 28 of Defendants’ number of direct violations translates to \$90 million to \$900 million in statutory
 damages.

F. Codex and Copilot Were Designed to Withhold Attribution, Copyright Notices, and License Terms from Their Users

92. Codex and Copilot have no way to determine whether license text or other Copyright Management Information (“CMI”)²¹ is part of the code it appears immediately before or after. Unless instructed otherwise, it will assume that CMI that usually appears just before a given block of code is an important part of that code or otherwise necessary for it to function.

93. It is a common practice to provide the applicable license text at the top of every source file in the codebase. The purpose of this practice is to avoid the code from being divorced from the license. This may occur via “vendoring,” a method of creating a derivative work by including source files from a copyrighted project directly into another project without following the terms of the license or providing attribution or a copyright notice. Copilot circumvents this protective measure to mask the degree of vendoring it engages in.

94. Early iterations of Copilot reproduced license text. For example, in a blog post, GitHub noted “In one instance, GitHub Copilot suggested starting an empty file with something it had even seen more than a whopping 700,000 different times during training—that was the GNU General Public License.”²² Copilot no longer suggests licenses in this way because it has been altered not to. As GitHub explains: “GitHub Copilot *has* changed to require a minimum file content. So some of the suggestions flagged here would not have been shown by the current version.”

95. In July 2021, near Copilot’s launch, it would sometimes produce license text, attribution, and copyright notices. This CMI was not always accurate. Copilot no longer reproduces these types of CMI, incorrect or otherwise, on a regular basis. It has been altered not to.

²¹ CMI is defined in detail below in Paragraph 144.

²² <https://github.blog/2021-06-30-github-copilot-research-recitation/>.

G. Open-Source Licenses Began to Appear in the Early 1990s

96. In 1991, software engineer Linus Torvalds began a project to create a UNIX-like operating system that would run on common PC hardware. This project became known as Linux.

97. To encourage adoption of his system, and persuade other programmers to contribute, he released Linux under what was then an unusual software license called the GNU General Public License, or GPL.

98. The GPL is a software license. But whereas most software licenses required payment, software under the GPL is provided for free. Whereas most software licenses did not include source code, GPL software always included source code. And whereas most software licenses prohibited derivative works, the GPL not only allowed it, but encouraged it.

99. In certain ways, however, the GPL still operated like a traditional software license. For example, consistent with copyright law, it depended on an assertion of copyright by the software author. Even though GPL software was available at no charge, the GPL contained conditions on its users as licensees.

100. One license requirement was that a program derived from GPL software had to redistribute certain information about that software:

You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this General Public License and to the absence of any warranty; and give any other recipients of the Program a copy of this General Public License along with the Program.²³

Failure to adhere to these conditions constituted a violation of the license, triggering the possibility of legal action. Provisions of the GPL are enforceable, and many GPL licensors have sought to enforce GPL licenses through court proceedings and other litigation.

101. The early years of Linux paralleled the early years of the World Wide Web. The fact that Linux was free and ran on common computer hardware made it a popular choice for web

²³ <https://www.gnu.org/licenses/old-licenses/gpl-1.0.en.html>.

1 servers. Because of its contrarian GPL licensing, Linux became hugely popular. A large ecosystem
2 of other programs and tools grew around it. This contributed to the explosive growth of the web
3 and other network services across the rest of the 1990s.

4 102. In turn, the growth of the World Wide Web made it easier for developers in
5 different places to collaborate on software. The GPL, and licenses like it, were a natural fit for this
6 kind of collaborative work.

7 103. Around 1998, a new name was coined as an umbrella term for these principles of
8 software licensing and development: *open source*.

9 **H. Microsoft Has a History of Flouting Open-Source License Requirements**

10 104. During the 1980s and 1990s, Microsoft was primarily a software company,
11 focusing largely on operating systems and related applications. These included its DOS operating
12 system and later, its Windows operating system. Windows generated billions of dollars in revenue
13 from its sale and licensing as proprietary software for desktop computers and servers. Microsoft
14 derived substantial income from sale of licensed products and devotes substantial resources to
15 protecting and enforcing such licenses.

16 105. Windows is a graphical operating system. It allows users to view and store files,
17 run software and games, play videos, and provides a way to connect to the internet.

18 106. Linux represented a competitive threat to Windows. It ran on the same hardware.
19 It performed many of the same functions. It was free. Many programmers at the time considered
20 Linux to be functionally superior to Windows.

21 107. Microsoft has engaged in a problematic practice known as “vaporware,” where
22 products are announced but are in fact late, never manufactured, or canceled. Typically the
23 company promising vaporware never has any intention of providing it. The term vaporware was
24 coined by Microsoft in 1982 in reference to the development of its Xenix operating system.

25 108. Microsoft described its anti-Linux strategy as “FUD,” standing for fear,
26 uncertainty, and doubt. Microsoft focused extra attention to Linux’s open-source aspects.

27 109. In 1998, a source at Microsoft leaked what became known as the “Halloween
28 Documents”, revealing Microsoft’s thinking on how to counter the competitive threat from

Linux. Among other things, the documents emphasized the importance of countering the “long term developer mindshare threat”, and concluded that to defeat open source, “[Microsoft] must target a process rather than a company”.²⁴

110. In 2001, Microsoft CEO Steve Ballmer said “The way the [GPL] is written, if you use any open-source software, you must make the rest of your software open source. . . . Linux is a cancer that attaches itself in an intellectual property sense to everything it touches.”²⁵

Ballmer’s summary of GPL licensing was not accurate. In 2001, Linux was being used by corporations of every size. The growth of open source up to that point, and since, has been made possible by the open-source community’s respect for and compliance with applicable licenses.

111. In 2001, Microsoft was the defendant in a major software-related antitrust case, *United States v. Microsoft Corporation*.²⁶ In this case, the U.S. Department of Justice accused Microsoft of maintaining a software monopoly by illegally imposing technical restrictions on manufacturers of personal computers, including “tying” violations related to the Internet Explorer web browser. Judge Thomas Penfield Jackson, who presided over the antitrust trial, opined that Microsoft is “a company with an institutional disdain for both the truth and for rules of law that lesser entities must respect. It is also a company whose ‘senior management’ is not averse to offering specious testimony to support spurious defenses to claims of its wrongdoing.”²⁷

112. In 2007, Microsoft admitted that it tried to influence the vote of an ISO open-standards committee by offering money to certain business partners in Sweden to vote for Microsoft’s preferred outcome.²⁸

113. After observing the rapid growth of Amazon’s original cloud computing products, Microsoft has expanded its business into cloud computing, which it has branded Microsoft Azure

²⁴ <http://www.catb.org/esr/halloween/halloween1.html>.

²⁵ <https://lwn.net/2001/0607/a/esr-big-lie.php3>.

²⁶ No. Civ.A. 00-1457 TPJ.

²⁷ *Jackson v. Microsoft Corp.*, 135 F. Supp. 2d 38 (D.D.C. 2001).

²⁸ <https://learn.microsoft.com/en-us/archive/blogs/jasonmatusow/open-xml-the-vote-in-sweden/>.

or simply Azure. Microsoft announced Azure to developers in 2008. It was formally released in 2010. Azure uses large-scale virtualization at Microsoft data centers and offers many hundreds of services, including infrastructure as a service (“IaaS”), platform as a service (“PaaS”), compute services, Azure Active Directory, mobile services, storage services, communication services, data management, messaging, developer services, Azure AI, blockchain, and others.

I. GitHub Was Designed to Cater to Open-Source Projects

114. By 2002, Linux had become immensely popular. But the project itself had become unwieldy and had outgrown its reliance on informal systems of managing software source code (also known as *source-control systems*). The Linux community needed something better.

115. Linus Torvalds set about writing a new source-control system. He named his new system Git. He released it under the GPL. It quickly became the source-control system of choice for open-source programmers.

116. A single software project stored in Git is called a *source repository*, commonly shortened to *repository* or just *repo*. A Git source repository would typically be stored on a networked server accessible to a group of programmers.

117. This became less convenient, however, when programmers were distributed among multiple locations, rather than being in a single location. A Git repository could be stored on an internet-accessible server. But setting up that server hardware and being responsible for it was inconvenient and expensive.

118. In 2008, a group of open-source developers in San Francisco, California founded GitHub. GitHub managed internet servers that hosted Git source repositories. With an account at GitHub, an open-source developer could easily set up a Git project accessible to collaborators anywhere in the world. From early on, GitHub’s core market was open-source developers, whom it attracted by making many of its hosting services free.

119. Most open-source programmers used GitHub to create “public” repositories, meaning that anyone could view them & access them. GitHub also allowed programmers and organizations to create “private” repositories, which were not accessible from the public GitHub website, and required password access.

1 120. Open-source licensing was integral to GitHub. GitHub encouraged open-source
2 developers to understand and use open-source licenses for their work. Many—though not all—
3 public repositories on GitHub carry an open-source license. By convention, this license is stored
4 at the top level of each repository in a file called LICENSE. GitHub’s interface also includes a
5 button on the front pages of most repositories users can click to see details of the applicable
6 license. A human user could easily find the license in either of these locations—as could an AI
7 anywhere near as powerful as Codex or Copilot.

8 121. Though the GPL is one of the early open-source licenses and remains common,
9 it’s not the only open-source license. Examples of other common open-source licenses include
10 the MIT License, the Apache License, and the Berkeley Software Distribution License (all of
11 which are included in the Suggested Licenses).

12 122. Though these licenses differ in their wording and their details, most of them share
13 a requirement that a copy of the license be included with any copy, derivative, or redistribution of
14 the software, and that the author’s name and copyright notice remains intact. This is not a
15 controversial requirement of open-source licenses—indeed, it has been an integral part of the
16 GPL for over 30 years.

17 123. There are also many public repositories on GitHub that have no license. Though
18 GitHub has encouraged awareness of licenses among its users, it has never imposed a default
19 license on public repositories. A public repository without a license is subject to ordinary rules of
20 U.S. copyright.

21 124. Open-source developers flocked to GitHub. By 2018, GitHub had become the
22 largest and most successful Git hosting service, hosting millions of users and projects.

23 125. In October 2018, Microsoft acquired GitHub for \$7.5 billion. It was important to
24 Microsoft that programmers use GitHub. Microsoft had developed a well-deserved poor
25 reputation because of its documented vaporware, FUD, and other business practices, including
26 those targeted at open-source programs and programming, and open-source licensing specifically.
27 Microsoft made false and misleading statements and omissions to assuage such concerns,
28

1 including its primary mantra intended to win over the open-source community: “Microsoft Loves
2 Open Source.”

3 **J. OpenAI Is Intertwined with Microsoft and GitHub**

4 126. OpenAI, Inc. is a nonprofit corporation founded in December 2015 by a group that
5 included Greg Brockman, Ilya Sutskever, and other AI researchers; Elon Musk, CEO of Tesla;
6 and Sam Altman, president of Y Combinator, a tech-startup incubator with hundreds of
7 companies in its portfolio. Musk and Altman served as co-chairs of OpenAI, Inc. One of OpenAI,
8 Inc.’s current board members is Reid Hoffman, founder of LinkedIn, which is now a Microsoft
9 subsidiary. Mr. Hoffman is also a member of the Microsoft Board of Directors.

10 127. Less than a year later, in November 2016, it first partnered with Microsoft. It
11 described the partnership as follows: “We’re working with Microsoft to start running most of our
12 large-scale experiments on Azure. This will make Azure the primary cloud platform that OpenAI
13 is using for deep learning and AI, and will let us conduct more research and share the results with
14 the world.”

15 128. Initially, OpenAI, Inc. held itself out as a “non-profit artificial intelligence research
16 company” that sought to shape AI “in the way that is most likely to benefit humanity as a whole.”

17 129. OpenAI, Inc. reportedly secured \$1 billion in initial funding, from sources that
18 were largely not disclosed, but included at least most of its founders.

19 130. OpenAI, Inc. obtained its initial source of training data from its founders’
20 companies. According to reporting at the time, Musk and Altman planned to “pool[] online data
21 from their respective companies” to serve as training data for OpenAI, Inc. projects. Musk
22 planned to contribute data from Tesla; Altman planned to have Y Combinator companies “share
23 their data with OpenAI.”²⁹

24 131. In February 2019, Altman created OpenAI, LP, a for-profit subsidiary of the
25 nonprofit entity OpenAI, Inc. The new OpenAI, LP entity would serve as a vessel for accepting
26 traditional outside investment in exchange for equity and distributing profits.

27 ²⁹ [https://www.wired.com/2015/12/elon-musks-billion-dollar-ai-plan-is-about-far-more-than-](https://www.wired.com/2015/12/elon-musks-billion-dollar-ai-plan-is-about-far-more-than-saving-the-world/)
28 [saving-the-world/](https://www.wired.com/2015/12/elon-musks-billion-dollar-ai-plan-is-about-far-more-than-saving-the-world/).

132. In July 2019, OpenAI, L.P. accepted a \$1 billion investment from Microsoft. In addition to cash, Microsoft would become the exclusive licensor of certain OpenAI, LP products (including GPT-3, described below in Paragraph 135). Also, as part of this alliance, OpenAI, LP would use Microsoft's cloud-computing platform, Azure, exclusively to develop and host its products. Some portion of Microsoft's investment was paid in credits for use of Azure rather than cash. Finally, Microsoft and OpenAI agreed to "jointly build new Azure AI supercomputing technologies."

133. Azure is a major growth area for Microsoft. In its most recent earnings report on October 25, 2022, "Azure and other cloud services" grew by 35% from the previous quarter, more than any other product.³⁰ Azure has grown rapidly since Microsoft began its partnership with OpenAI in 2016. Its revenue grew by 50% or more every quarter from 2016 through the first three quarters of 2020.

134. In May 2020, Microsoft and OpenAI announced they had jointly built a supercomputer in Azure that would be used exclusively by OpenAI to train its AI models. Microsoft's influence over and frequent collaboration with OpenAI has led some to describe Microsoft as "the unofficial owner of OpenAI."³¹

135. One of OpenAI's projects is GPT-3, a so-called "large language model" designed to emit naturalistic text. When researchers noticed that GPT-3 could also generate software code, they started studying whether they could make a new AI model specifically trained for this purpose. This project became known as Codex.

136. Sometime after July 2019, OpenAI and Microsoft began collaborating on a code-completion product for GitHub that would use Codex as its underlying model. This product became known as Copilot.

137. On September 28, 2022, OpenAI released an image-generation AI called DALL-E-2. Much like Copilot, DALL-E-2 removes any attribution and/or copyright notice from the

³⁰ <https://www.microsoft.com/en-us/Investor/earnings/FY-2023-Q1/press-release-webcast/>.

³¹ <https://venturebeat.com/ai/what-to-expect-from-openais-codex-api/>.

images it uses to create derivative works. Like with Codex, here, OpenAI ignores the rights of the owners of copyrights to images it has ingested.

138. In another joint project, Microsoft and OpenAI recently launched a preview of a product called “Azure OpenAI Service.”³² This service will “Leverage large-scale, generative AI models with deep understandings of language and code to enable new reasoning and comprehension capabilities for building cutting-edge applications. Apply these coding and language models to a variety of use cases, such as writing assistance, code generation, and reasoning over data. Detect and mitigate harmful use with built-in responsible AI and access enterprise-grade Azure security.”

K. Conclusion of Factual Allegations

139. Future AI products may represent a bold and innovative step forward. GitHub Copilot and OpenAI Codex, however, do not. Defendants should not have released these products until they could ensure that they did not constantly violate Plaintiffs’ and the Class’s intellectual-property rights, licenses, and other rights.

140. Defendants have made no attempt to comply with the open-source licenses that are attached to much of their training data. Instead, they have pretended those licenses do not exist, and trained Codex and Copilot to do the same. By simultaneously violating the open-source licenses of tens-of-thousands—possibly millions—of software developers, Defendants have accomplished software piracy on an unprecedented scale. As Microsoft’s Co-Founder Bill Gates once said regarding software piracy: “the thing you do is theft.”³³

141. There is no inherent limitation or constraint of AI systems that made any of this necessary. Defendants chose to build AI systems designed to enhance their own profit at the expense of a global open-source community that they had once sought to foster and protect. GitHub and OpenAI are profiting at the expense of Plaintiffs’ and the Class’s rights.

³² <https://azure.microsoft.com/en-us/products/cognitive-services/openai-service/>.

³³ https://www.digibarn.com/collections/newsletters/homebrew/V2_01/gatesletter.html

VIII. CLAIMS FOR RELIEF

COUNT I VIOLATION OF THE DIGITAL MILLENNIUM COPYRIGHT ACT 17 U.S.C. §§ 1201–1205 (Direct, Vicarious, and Contributory) (Against All Defendants)

142. Plaintiffs and the Class hereby repeat and incorporate by reference each preceding and succeeding paragraph as though fully set forth herein.

143. Plaintiffs and members of the Class own the copyrights to Licensed Materials used to train Codex and Copilot. Copilot was trained on millions—possibly billions—of lines of code publicly available on GitHub. Copilot runs on Microsoft’s Azure cloud platform exclusively and Microsoft had input in the creation of Copilot. Microsoft is aware that Copilot ignores License Terms and that it was trained almost exclusively on Licensed Materials.

144. Plaintiffs and members of the Class included the following Copyright Management Information (as defined in Section 1202(c) of the DMCA) (“CMI”) in the Licensed Materials:

- a. copyright notices;
- b. the title and other information identifying the Licensed Materials;
- c. the name of, and other identifying information about, the authors of the Licensed Materials;
- d. the name of, and other identifying information about, the copyright owners of the Licensed Materials;
- e. terms and conditions for use of the Licensed Materials, specifically the Suggested Licenses; and
- f. identifying numbers or symbols referring to CMI or links to CMI.

145. Defendants did not contact Plaintiffs and the Class to obtain authority to remove or alter CMI from the Licensed Materials within the meaning of the DMCA.

146. Defendants knew that they did not contact Plaintiffs and the Class to obtain authority to remove or alter CMI from the Licensed Materials within the meaning of the DMCA.

1 147. As part of the scheme, Defendants did not attempt to contact Plaintiffs to obtain
 2 authority to remove or alter CMI from the Licensed Materials within the meaning of the DMCA.
 3 In fact, Defendants' removal of CMI made it difficult or impossible to contact Plaintiffs and the
 4 Class to obtain authority to remove or alter CMI from the Licensed Materials within the meaning
 5 of the DMCA. Rather, Defendants removed or altered CMI from open-source code that is owned
 6 by Plaintiffs and the Class after the code was uploaded to a GitHub repository by incorporating it
 7 into Copilot with its CMI removed.

8 148. Without the authority of Plaintiffs and the Class, Defendants intentionally
 9 removed or altered CMI from the Licensed Materials after they were uploaded to one or more
 10 GitHub repositories.

11 149. Defendants had access to but were not licensed by Plaintiffs nor the Class to train
 12 any machine learning, AI, or other pseudo-intelligent computer program, algorithm, or other
 13 functional prediction engine using the Licensed Materials.

14 150. Defendants had access to but were not licensed by Plaintiffs nor the Class to
 15 incorporate the Licensed Materials into Copilot.

16 151. Defendants had access to but were not licensed by Plaintiffs nor the Class to create
 17 Derivative Works³⁴ based upon the Licensed Materials.

18 152. Defendants had access to but were not licensed by Plaintiffs nor the Class to
 19 distribute the Licensed Materials as they do through Copilot.

20 153. Without the authority of Plaintiffs and the Class, Defendants distributed CMI
 21 knowing that the CMI had been removed or altered without authority of the copyright owner or
 22 the law with respect to the Licensed Materials.

23 154. Defendants distributed copies of the Licensed Materials knowing and intending
 24 that CMI had been removed or altered without authority of the copyright owner or the law, with
 25 respect to the Licensed Materials.

26
 27 ³⁴ "Derivative Works" as used herein refers to Copilot's Output to the extent they are derived
 28 from Licensed Materials. The definition also includes the Copilot product itself, which is a
 Derivative Work based upon a large corpus of Licensed Materials.

155. Defendants removed or altered CMI from the Licensed Materials knowing and intending that it would induce, enable, facilitate, or conceal infringement of copyright.

156. Without the CMI associated with the Licensed Materials, Copilot users are induced or enabled to copy the Licensed Materials. Because CMI has been removed, Copilot users do not know whether Output is owned by someone else and subject to restrictions on use. Without the CMI, copyright infringement is facilitated or concealed, because Plaintiffs and the Class are prevented from knowing or learning that the Output is based upon one or more of the Licensed Materials. Use of the Licensed Materials is not infringement when the terms of the applicable Suggested License are followed. Had the CMI not been removed, Copilot users would be aware of the Licenses and their obligations under them. The terms of the applicable Suggested License would have allowed those users to use the Licensed Materials without infringement. By withholding and concealing license information and other CMI, Defendants prevented Copilot users from making non-infringing use of the Licensed Materials. This contradicts the express wishes of Plaintiffs and the Class, which are set forth explicitly in the Suggested Licenses under which the Licensed Materials are offered.

157. Defendants removed or altered CMI from Licensed Materials owned by Plaintiffs and the Class while possessing reasonable grounds to know that it would induce, enable, facilitate, and/or conceal infringement of copyright in violation of the DMCA. By omitting and concealing CMI from Copilot's Output, Defendants have reasonable grounds to know that innocent infringers are induced or enabled to copy the Licensed Materials, because CMI has been removed. Without the CMI, Defendants have reasonable grounds to know copyright infringement is facilitated or concealed, because Plaintiffs and the Class have the difficult or impossible task of proving the Licensed Materials belong to them.

158. Defendants knowingly provided CMI that is false with respect to the Licensed Materials. Defendants have a business practice of asserting and/or implying that Copilot is the author of the Licensed Materials. Defendants knowingly distributed CMI that is false, with respect to the Licensed Materials. Defendants have a business practice of asserting and/or implying that Copilot is the author of the Licensed Materials.

1 159. Defendants provided or distributed false CMI from the Licensed Materials with
2 respect to Copilot's Output with the intent and foreseeable result to induce, enable, facilitate, or
3 conceal infringement. Defendants have a business practice of asserting and/or implying that
4 Copilot is the author of the Licensed Materials. This false CMI induces or enables Defendants or
5 Copilot users to copy the Licensed Materials. Defendants' false description of the source of
6 Copilot's Output facilitated or concealed infringement by Defendants and Copilot users because
7 Plaintiffs and the Class have the difficult or impossible task of proving that the copyrights to the
8 suggested portions of their Licensed Materials belong to them once those Licensed Materials
9 have been delinked from all identifying information and all license terms governing their use.

10 160. The profits attributable to Defendants' violation of the DMCA include the
11 revenue from: Copilot subscription fees, sales of or subscriptions to Defendants' Copilot-related
12 products and/or services that are used to run Copilot, hosting Copilot on Azure, and any other of
13 Defendants' products that contain copies of the Licensed Materials without all the original CMI.
14 The Licensed Materials add nearly all value to the Copilot product because the purpose of
15 Copilot is to provide code and the source of that code is the Licensed Materials. Without the
16 Licensed Materials, Copilot would not be functional.

17 161. On information and belief, Defendants could have trained Copilot to include
18 attribution, copyright notices, and license terms when it provides Output covered by a License.

19 162. Defendants did not request or obtain permission from Plaintiffs and the Class to
20 use the Licensed Materials for Defendants' Copilot product.

21 163. Defendants use of the Licensed Materials does not follow the requirements of the
22 Suggested Licenses associated with the Licensed Materials. In particular, Copilot fails to provide
23 attribution for the creator nor the owner of the Work. Copilot fails to include the required
24 copyright notice included in the License. Copilot fails to include the applicable Suggested
25 License's text.

26 164. Defendants are sophisticated with respect to intellectual property matters related
27 to open-source code. Microsoft in particular has extensive experience granting licenses, obtaining
28 licenses, and enforcing license terms. Its most recent Annual Report states:

We protect our intellectual property investments in a variety of ways. We work actively in the U.S. and internationally to ensure the enforcement of copyright, trademark, trade secret, and other protections that apply to our software and hardware products, services, business plans, and branding. We are a leader among technology companies in pursuing patents and currently have a portfolio of over 69,000 U.S. and international patents issued and over 19,000 pending worldwide. While we employ much of our internally-developed intellectual property exclusively in our products and services, we also engage in outbound licensing of specific patented technologies that are incorporated into licensees' products. From time to time, we enter into broader cross-license agreements with other technology companies covering entire groups of patents. We may also purchase or license technology that we incorporate into our products and services. At times, we make select intellectual property broadly available at no or low cost to achieve a strategic objective, such as promoting industry standards, advancing interoperability, supporting societal and/or environmental efforts, or attracting and enabling our external development community. **Our increasing engagement with open source software will also cause us to license our intellectual property rights broadly in certain situations.**

Microsoft Corporation Annual Report, Form 10-K at 27 (July 28, 2022) (emphasis added).³⁵

165. GitHub, which offers the Copilot product jointly with OpenAI, also has extensive experience with the DMCA. GitHub knows or reasonably should know that the Licensed Materials it hosts are subject to copyright. It provides the language of the Suggested Licenses to users, all of which include copyright notices. Its 2022 Transparency Report—January to June³⁶ states: “Copyright-related takedowns (which we often refer to as DMCA takedowns) are particularly relevant to GitHub because so much of our users’ content is software code and can be eligible for copyright protection.”³⁷ In the first six months of 2022, GitHub processed 1220 DMCA takedown requests. Its DMCA Takedown Policy³⁸ notes “GitHub probably never would have existed without the DMCA.”

³⁵ <https://microsoft.gcs-web.com/static-files/07cf3c30-cfc3-4567-b20f-f4b0f0bd5087/>.

³⁶ <https://github.blog/2022-08-16-2022-transparency-report-january-to-june/>.

³⁷ <https://github.blog/2022-08-16-2022-transparency-report-january-to-june/>.

³⁸ <https://docs.github.com/en/site-policy/content-removal-policies/dmca-takedown-policy#what-is-the-dmca/>.

166. GitHub also knows or reasonably should know the portions of the DMCA giving rise to Plaintiffs' claim. In its 2021 Transparency Report, "Before removing content based on alleged circumvention of copyright controls (under Section 1201 of the US DMCA or similar laws in other countries), we carefully review both the legal and technical claims, and we sponsor a Developer Defense Fund to provide developers with meaningful access to legal resources."³⁹

167. GitHub is aware that Copilot's removal of CMI is illegal. For example, it states that "publishing or sharing tools that enable circumvention are not [permitted]"⁴⁰ and "Distributing tools that enable circumvention is prohibited, even if their use by developers falls under the exemption [for security research]."⁴¹ GitHub has also frequently published articles discussing the DMCA, its application, and the Copyright Office's guidance on its scope and exceptions.⁴²

168. Unless Defendants are enjoined from violating the DMCA, Plaintiffs and the Class will suffer great and irreparable harm by depriving them of the right to identify and control the reproduction and/or distribution of their copyrighted works, to have the terms of their open-source licenses followed, and to pursue copyright-infringement remedies. Defendants will not be damaged if they are required to comply with the DMCA. Plaintiffs and the Class members are therefore entitled to an injunction barring Defendants from violating the DMCA and impounding any device or product that is in the custody or control of Defendants and that the court has reasonable cause to believe was involved in a violation of the DMCA.

169. Plaintiffs and the Class are further entitled to recover from Defendants the actual or statutory damages Plaintiffs and the Class sustained pursuant to 17 U.S.C. § 1203(c) and for Plaintiffs' and the Class's costs and attorneys' fees in enforcing the Licenses. Plaintiffs and the Class are also entitled to recover as restitution from Defendants for any unjust enrichment,

³⁹ <https://github.blog/2022-01-27-2021-transparency-report/>.

⁴⁰ <https://github.blog/2020-11-19-take-action-dmca-anti-circumvention-and-developer-innovation/#what-dmca-exemptions-do-not-do/>.

⁴¹ <https://github.blog/2021-11-23-copyright-office-expands-security-research-rights/>.

⁴² See, e.g., Footnotes 36–41.

1 including gains, profits, and advantages that Defendants have obtained as a result of their breach
2 of the Licenses.

3 170. Defendants conspired together and acted jointly and in concert pursuant to their
4 scheme to commit the acts that violated the DMCA alleged herein.

5 171. Defendants induced Copilot users to unknowingly violate the DMCA by
6 withholding attribution, licensing, and other information as described herein.

7 **COUNT II**
8 **BREACH OF CONTRACT—OPEN-SOURCE LICENSE VIOLATIONS**
9 **Common Law**
(Against All Defendants)

10 172. Plaintiffs and the Class hereby repeat and incorporate by reference each preceding
11 and succeeding paragraph as though fully set forth herein.

12 173. Plaintiffs and the Class offer code under various Licenses, the most common of
13 which are set forth in Appendix A. Use of each of the Licensed Materials is allowed only pursuant
14 to the terms of the applicable Suggested License.

15 174. Plaintiffs and the Class granted Defendants a license to copy, distribute, and/or
16 create Derivative Works under the Suggested Licenses. Each of the Suggested Licenses requires
17 at least (1) that attribution be given to the owner of the Licensed Materials used, (2) inclusion of a
18 copyright notice for the Licensed Materials used, and (3) inclusion of the terms of the applicable
19 Suggested License. When providing Output, Copilot does not comply with any of these terms.

20 175. Defendants accepted the terms of Plaintiffs' and the Class's Licenses when it used
21 the licensed code to create Copilot and when it incorporated the licensed code into Copilot. They
22 have accepted and continue to accept the applicable Licenses every time Copilot Output's
23 Plaintiffs' or the Class's copyrighted code. As such, contracts have been formed between
24 Defendants on the one hand and Plaintiffs and the Class on the other.

25 176. Plaintiffs and the Class have performed each of the conditions, covenants, and
26 obligations imposed on them by the terms of the License associated with their Licensed
27 Materials.
28

1 177. Plaintiffs and members of the Class hold the copyright in the contents of one or
2 more code repositories that have been hosted on GitHub's platform.

3 178. Plaintiffs and the Class have appended one of the Suggested Licenses to each of
4 the Licensed Materials.

5 179. Plaintiffs and the Class did not know about, authorize, approve, or license the
6 Defendants' use of the Licensed Materials in the matter at issue in this Complaint before they
7 were used by Defendants.

8 180. Defendants have substantially and materially breached the applicable Licenses by
9 failing to provide the source code of Copilot nor a written offer to provide the source code upon
10 the request of each licensee.

11 181. Defendants have substantially and materially breached the applicable Licenses by
12 failing to provide attribution to the creator and/or owner of the Licensed Materials.

13 182. Defendants have substantially and materially breached the applicable Licenses by
14 failing to include copyright notices when Copilot Outputs copyrighted OS code.

15 183. Defendants have substantially and materially breached the applicable Licenses by
16 failing to identify the License applicable to the Work and/or including its text when Copilot
17 Outputs code including a portion of a Work.

18 184. Plaintiffs and the Class have suffered monetary damages as a result of Defendants'
19 conduct.

20 185. The conduct of Defendants is causing and, unless enjoined and restrained by this
21 Court, will continue to cause Plaintiffs and the Class great and irreparable injury that cannot fully
22 be compensated or measured in money.

23 186. As a direct and proximate result of these material breaches by Defendants,
24 Plaintiffs and the Class are entitled to an injunction requiring Defendants to comply with all the
25 terms of any License governing use of code that was used to train Copilot, otherwise incorporated
26 into Copilot, and/or reproduced as Output by Copilot.

27 187. Plaintiffs and the Class are further entitled to recover from Defendants the
28 damages Plaintiffs and the Class sustained—including consequential damages—for Plaintiffs' and

the Class’s costs in enforcing their contractual rights. Plaintiffs and the Class are also entitled to recover as restitution from Defendants for any unjust enrichment, including gains, profits, and advantages that Defendants have obtained as a result of their breach of contract.

COUNT III
TORTIOUS INTERFERENCE IN A CONTRACTUAL RELATIONSHIP
Common Law
(Against All Defendants)

188. Plaintiffs and the Class hereby repeat and incorporate by reference each preceding and succeeding paragraph as though fully set forth herein.

189. Defendants have wrongfully interfered with the business interests and expectations of Plaintiffs and the Class by improperly using Copilot to create Derivative Works that compete against OSC.

190. At GitHub’s upcoming yearly conference, GitHub Universe 2022, it will host a presentation called “How to compete with open source—and win.”

191. Plaintiffs and the Class have suffered monetary, reputational, and other damages as a result of Defendants’ conduct.

192. The harm was the actual, proximate, intentional, direct, and foreseeable consequence of Defendant’s conduct.

193. The conduct of Defendants is causing and, unless enjoined and restrained by this Court, will continue to cause Plaintiffs and the Class great and irreparable injury that cannot fully be compensated or measured in money.

COUNT IV
FRAUD
Common Law
(Against GitHub)

194. Plaintiffs and the Class hereby repeat and incorporate by reference each preceding and succeeding paragraph as though fully set forth herein.

195. GitHub made certain representations to Plaintiffs and the Class to induce them to publicly post their code on GitHub. Specifically, in both its Terms of Service and its Privacy Statement, GitHub promises not to sell Licensed Materials or anything else uploaded to or shared

1 with GitHub. It also promises not to distribute Licensed Materials outside GitHub. As explained
 2 above, Copilot operates on an individual's computer as an extension to their editor as well as on
 3 Microsoft's Azure cloud platform. Neither are part of GitHub. It Outputs in the user's editor,
 4 which is not part of GitHub.

5 196. Plaintiffs and the Class relied upon those representations in choosing to upload
 6 Licensed Materials to GitHub. GitHub has long held itself out as the best place to host open-
 7 source code repositories. It has courted the business of users it expects will include Licenses with
 8 their code. It facilitates this by allowing users to easily select the name of a license, including the
 9 Suggested Licenses, when creating a repository rather than finding the text of the license and
 10 adding it themselves. GitHub provides the terms, it can hardly claim to be unaware of what they
 11 are or what they mean. If it didn't understand the requirements of a given Suggested License, it
 12 would not have provided it as an option to its users.

13 197. GitHub failed to honor its representations in creating and operating Copilot. It
 14 sells Plaintiffs' and the Class's Licensed Materials as part of Copilot. It also distributes them. It
 15 does so without following any of the License Terms.

16 198. As such, GitHub failed to honor its representations in operating Copilot.

17 199. The conduct of GitHub is causing and, unless enjoined and restrained by this
 18 Court, will continue to cause Plaintiffs and the Class great and irreparable injury that cannot fully
 19 be compensated or measured in money. Namely, it will continue the proliferation of copies of
 20 Licensed Materials divorced from their licenses and identifying information until infringement is
 21 so prevalent no amount of enforcement by Plaintiffs and the Class could stop its spread.

22 **COUNT V**
 23 **FALSE DESIGNATION OF ORIGIN—REVERSE PASSING OFF**
 24 **15 U.S.C. § 1125**
(GitHub and OpenAI)

25 200. Plaintiffs and the Class hereby repeat and incorporate by reference each preceding
 26 and succeeding paragraph as though fully set forth herein.

27 201. GitHub and OpenAI have used or made, and will continue to use or make, in
 28 commerce throughout the United States, including in California, one or more words, terms,

names, symbols, or devices, or any combination thereof, or any false and/or misleading designation of origin, false and/or misleading description of fact, or false and/or misleading representation of fact that is likely to cause consumer confusion, or to cause mistake, or to deceive as to the affiliation, connection, or association of Plaintiffs' and the Class's Licensed Materials and Copilot, or as to the origin, sponsorship, or approval of Plaintiffs' and the Class's Licensed Materials and Copilot.

202. As a result, GitHub and OpenAI have intentionally violated 15 U.S.C. § 1125(a)(1)(A).

203. As an actual and proximate result of GitHub's and OpenAI's acts, Plaintiffs and the Class have suffered and continue to suffer harm.

COUNT VI
UNJUST ENRICHMENT
Cal. Bus. & Prof. Code §§ 17200, et seq. and Common Law
(GitHub and OpenAI)

204. Plaintiffs and the Class hereby repeat and incorporate by reference each preceding and succeeding paragraph as though fully set forth herein.

205. Plaintiffs and the Class have invested substantial time and energy in creating the Licensed Materials.

206. GitHub and OpenAI have unjustly utilized access to Licensed Materials hosted on GitHub. This code is used to create Derivative Works that are licensed to third parties in exchange for, *inter alia*, compliance with applicable License terms.

207. GitHub and OpenAI derive profit or other benefits from removal of attribution, copyright notices, and license terms from Licensed Materials and reselling it as Output through Copilot.

208. It would be unjust for GitHub and OpenAI to retain those benefits.

209. Plaintiffs and the Class have suffered monetary damages as a result of GitHub's and OpenAI's conduct.

210. The conduct of GitHub and OpenAI is causing and, unless enjoined and restrained by this Court, will continue to cause Plaintiffs and the Class great and irreparable injury that cannot fully be compensated or measured in money.

**COUNT VII
UNFAIR COMPETITION
15 U.S.C. § 1125; Cal. Bus. & Prof. Code §§ 17200, et seq.; and Common Law
(GitHub and OpenAI)**

211. Plaintiffs and the Class hereby repeat and incorporate by reference each preceding and succeeding paragraph as though fully set forth herein.

212. GitHub and OpenAI have engaged in unlawful business practices, including:

- a. Violations of Plaintiffs' and the Class's rights under the DMCA;
- b. Tortious interference in Plaintiffs' and the Class's contractual relations with users of their code;
- c. Passing off Copilot's Output as originating from Copilot, GitHub, and/or OpenAI;
- d. Privacy violations, namely violation of the CCPA and negligent handling of personal information.

The details of the unlawful business practices are set forth herein.

213. Plaintiffs and the Class have suffered monetary damages as a result of GitHub's and OpenAI's conduct.

214. The conduct of GitHub and OpenAI is causing and, unless enjoined and restrained by this Court, will continue to cause Plaintiffs and the Class great and irreparable injury that cannot fully be compensated or measured in money.

**COUNT VIII
BREACH OF CONTRACT
VIOLATION OF GITHUB PRIVACY POLICY AND TERMS OF SERVICE
Cal. Bus. & Prof. Code § 22575-22579; Cal. Civ. Code § 1798.150; and Common Law
(Against GitHub)**

215. Plaintiffs and the Class hereby repeat and incorporate by reference each preceding and succeeding paragraph as though fully set forth herein.

216. Plaintiffs and the Class are GitHub users who have accepted GitHub's Terms of Service. As a result, Plaintiffs and the Class have formed a contract, the terms of which are set

1 forth in GitHub's Terms of Service—including the additional GitHub Copilot Terms from
2 GitHub Terms for Additional Products and Features.

3 217. Plaintiffs and the Class are GitHub users who have accepted GitHub's Privacy
4 Statement. As a result, Plaintiffs and the Class have formed a contract.

5 218. GitHub's Privacy Statement, Terms of Service, and GitHub Copilot Terms share
6 definitions and refer to each other. As such, they are collectively referred to herein as "GitHub's
7 Policies" unless a distinction is necessary and are attached as Exhibit 1.

8 219. Plaintiffs and the Class have performed each of the conditions, covenants, and
9 obligations imposed on them by the terms of GitHub's Policies.

10 220. GitHub has substantially and materially breached GitHub's Policies in the
11 following ways:

- 12 a. Sharing Plaintiffs' and the Class's personal data with unauthorized third parties in
13 violation of the GitHub Privacy Statement;
- 14 b. Selling and distributing Plaintiffs' and the Class's personal data in contravention
15 of the GitHub Policies;
- 16 c. Use of Plaintiffs' and the Class's personal data after the GitHub Privacy Statement
17 explicitly claims it will be deleted;
- 18 d. Use and distribution of Plaintiffs' and the Class's personal data outside the
19 limitations set forth in the GitHub Privacy Statement.

20 221. Plaintiffs and the Class have suffered monetary damages as a result of GitHub's
21 conduct.

22 222. GitHub's conduct is causing and, unless enjoined and restrained by this Court,
23 will continue to cause Plaintiffs and the Class great and irreparable injury that cannot fully be
24 compensated or measured in money.

25 223. As a direct and proximate result of these material breaches by GitHub, Plaintiffs
26 and the Class are entitled to an injunction requiring GitHub to comply with all the terms of the
27 GitHub Policies.
28

224. Plaintiffs and the Class are further entitled to recover from GitHub the damages Plaintiffs and the Class sustained—including consequential damages—for Plaintiffs’ and the Class’s costs in enforcing GitHub’s Policies. Plaintiffs and the Class are also entitled to recover as restitution from GitHub for any unjust enrichment, including gains, profits, and advantages that it has obtained as a result of its breaches of the GitHub Policies.

COUNT IX
VIOLATION OF THE CALIFORNIA CONSUMER PRIVACY ACT
Cal. Civ. Code § 1798.150
(GitHub and OpenAI)

225. Plaintiffs and the Class hereby repeat and incorporate by reference each preceding and succeeding paragraph as though fully set forth herein.

226. At all relevant times, GitHub and OpenAI were “businesses” under the terms of Cal. Civ. Code § 1798.140(g) of the California Consumer Privacy Act (“CCPA”) as sole proprietorships, partnerships, limited liability companies, corporations, associations, or other legal entities operating in the State of California that collect consumers’ personal information. GitHub and OpenAI either have annual operating revenue above \$25 million, collect the personal information of 50,000 or more California residents annually, or derive at least fifty percent of their annual revenue from the sale of personal information of California residents.

227. At all relevant times, Plaintiffs and the Class were “consumers” under the terms of the CCPA as natural persons as defined in Section 17014 of Title 18 of the California Code of Regulations.

228. “Personal Information” is defined in Section 1798.140(o)(1) of the CCPA, which protects consumers’ personal information from collection, use, or sale by businesses without consumers’ notice and consent.

229. GitHub and OpenAI violated the CCPA by using customers’ PII without providing the required notice under the CCPA. GitHub and OpenAI did not notify Plaintiffs nor the Class they were using, distributing, or selling their PII to unauthorized third parties, namely Copilot users.

230. GitHub and OpenAI also violated the CCPA by failing to provide notice to its customers of their right to opt-out of the disclosure of their PII to unauthorized third parties, namely Copilot users.

231. GitHub and OpenAI also violated the CCPA by incorporating Plaintiffs' and the Class's personal information into Copilot with no way to alter or delete. And also with no way to share that personal data with Plaintiffs or the Class upon request.

232. GitHub and OpenAI also violated the CCPA by failing to provide a clear and conspicuous link entitled "Do Not Sell My Personal Information" to a webpage that enables a consumer—or a person authorized by a consumer—to opt out of the sale of Plaintiffs' and the Class's personal data through Copilot.

233. By the acts described above, GitHub and OpenAI violated the CCPA by negligently, carelessly, and recklessly collecting, maintaining, and controlling their customers' sensitive personal information and by engineering, designing, maintaining, and controlling systems that exposed their customers' sensitive personal information of which GitHub and OpenAI had control and possession to the risk of exposure to unauthorized persons, thereby violating their duty to implement and maintain reasonable security procedures and practices appropriate to the nature of the information to protect the personal information. GitHub and OpenAI allowed unauthorized users to view, use, manipulate, exfiltrate, and steal the nonencrypted and nonredacted personal information of Plaintiffs and other customers, including their personal and financial information.

234. GitHub and OpenAI are aware of Copilot's propensity for revealing PII. They have altered Copilot to force it to provide mock PII in place of real PII. But due to the many varieties of PII and various forms it can take, there is no way GitHub and OpenAI can ensure that it will not, at times, reproduce unaltered PII. Unless PII is removed before Copilot is trained on a given repository, Copilot will incorporate that PII and could, under the right circumstances, reproduce that PII verbatim. Unless all PII is removed from Copilot, it will continue to sometimes provide unaltered PII in its Output. On information and belief, some Copilot users have devised methods to increase the chances Copilot will produce accurate PII.

COUNT X
NEGLIGENCE—NEGLIGENT HANDLING OF PERSONAL DATA
Common Law
(GitHub and OpenAI)

235. Plaintiffs and the Class hereby repeat and incorporate by reference each preceding and succeeding paragraph as though fully set forth herein.

236. GitHub and OpenAI owed a duty of reasonable care toward Plaintiffs and the Class based upon GitHub’s and OpenAI’s relationship to them. This duty is based upon GitHub’s and OpenAI’s contractual obligations, custom and practice, right to control information in its possession, exercise of control over the information in its possession, authority to control the information in its possession, and the commission of affirmative acts that resulted in said harms and losses. Additionally, this duty is based on the requirements of California Civil Code section 1714 requiring all “persons,” including GitHub and OpenAI, to act in a reasonable manner toward others. This duty is also based on the specific statutory duties imposed on GitHub and OpenAI under California Civil Code sections 1798.100, *et seq.*, as businesses operating in the State of California that either have annual operating revenue above \$25 million, collect the personal information of 50,000 or more California residents annually, or derive at least 50 percent of their annual revenue from the sale of personal information of California residents.

237. GitHub and OpenAI breached their duties by negligently, carelessly, and recklessly collecting, maintaining, and controlling their customers’ sensitive personal information and engineering, designing, maintaining, and controlling systems—including Copilot—that exposed and continue to expose their customers’ sensitive personal information of which GitHub and OpenAI had control and possession to the risk of exposure to unauthorized persons.

238. GitHub and OpenAI also committed per se breaches of said duty by negligently violating the dictates of California Civil Code sections 1798.82, *et seq.*, and 1798.100, *et seq.*, and the provisions of the California Constitution enshrining the right to privacy, by failing to inform Plaintiffs and the Class of the access to their sensitive personal information by unauthorized persons expeditiously and without delay and failing to adequately safeguard this information from unauthorized access even after GitHub and OpenAI became aware of multiple instances of release of this information by Copilot. The provisions of the California Civil Code and the

1 California Constitution that GitHub and OpenAI violated were enacted to protect the class of
2 Plaintiffs here involved from the type of injury here incurred, namely their right to privacy and
3 the protection of their personal data. Plaintiffs and the Class were within the class of persons and
4 consumers who were intended to be protected by California Civil Code sections 1798.82, *et seq.*,
5 and 1798.100, *et seq.*

6 239. As a direct consequence of the actions described herein, and the breaches of
7 duties indicated thereby, unauthorized users gained access to, exfiltrated, stole, and gained
8 disclosure of the sensitive personal information of Plaintiffs and the Class, causing them harms
9 and losses including but not limited to economic loss, the loss of control over the use of their
10 identity, harm to their constitutional right to privacy, lost time dedicated to cure harm to their
11 privacy, the need for future expenses and time dedicated to the recovery and protection of further
12 loss, and privacy injuries associated with having their sensitive personal and financial information
13 disclosed.

14 **COUNT XI**
15 **CIVIL CONSPIRACY**
16 **Common Law**
(Against All Defendants)

17 240. Plaintiffs and the Class hereby repeat and incorporate by reference each preceding
18 and succeeding paragraph as though fully set forth herein.

19 241. On information and belief, Microsoft, GitHub, OpenAI, and the Individual
20 Defendants have worked together to create Copilot. In creating Copilot, Defendants willfully
21 avoided determining whether and how Copilot's training and Output may violate the rights of
22 Plaintiffs and the Class and other stakeholders. This is because Defendants understood that
23 through Copilot they would be engaging in a variety of unlawful conduct. Defendants conduct
24 resulted in violations of Plaintiffs' and the Class's rights as set forth herein.

25 242. On information and belief, OpenAI derives a financial or other valuable benefit
26 from the sale of Copilot. In exchange, OpenAI provided Microsoft an exclusive license to use its
27 GPT-3 language model.
28

243. On information and belief, Microsoft derives a financial benefit from sales of Copilot through payments or other form of compensation in exchange for GitHub's and OpenAI's use of Azure to run Copilot.

244. GitHub, Microsoft, and OpenAI agreed to a common plan or design to create, sell, and run Copilot to commit and conceal the following tortious acts:

- a. Violations of Plaintiffs' and the Class's rights under the DMCA Section 1202;
- b. Tortious interference in Plaintiffs' and the Class's contractual relations with users of their code;
- c. Passing off Copilot's Output as originating either from Copilot itself or from Defendants;
- d. Unfair competition with Plaintiffs and the Class by releasing and operating Copilot; and
- e. Privacy violations, namely violation of the CCPA and negligent handling of personal information.

COUNT XII
DECLARATORY RELIEF
28 U.S.C. § 2201(a) and Cal. Code Civ. Proc. § 1060
(Against All Defendants)

245. Plaintiffs and the Class hereby repeat and incorporate by reference each preceding and succeeding paragraph as though fully set forth herein.

246. An actual controversy exists between the Class (including Plaintiffs) and Defendants due to Defendants' operation of Copilot, which violates Plaintiffs' and the Class's rights, including but not limited to their rights under DMCA Section 1202, the Lanham Act, the CCPA, and Cal. Civ. Code § 17200 as alleged herein.

247. Plaintiffs are entitled to a judgment declaring that Defendants' actions are unlawful and, specifically, that Defendants violated DMCA Section 1202, the Lanham Act, the CCPA, and Cal. Civ. Code § 17200.

IX. DEMAND FOR JUDGMENT

WHEREFORE, Plaintiffs requests that the Court enter judgment on their behalf and on behalf of the Class defined herein, by adjudging and decreeing that:

248. This action may proceed as a class action, with Plaintiffs serving as Class Representatives, and with Plaintiffs' counsel as Class Counsel;
- a) Judgment in favor of Plaintiffs and the Class and against Defendants;
 - b) Permanent injunctive relief, including but not limited to making changes to its Copilot product to ensure that all applicable information set forth in 17 U.S.C. § 1203(b)(1) is included in along with any Output including associated code;
 - c) An order of costs and allowable attorney's fees pursuant to 17 U.S.C. § 1203(b)(4)–(5);
 - d) An award of statutory damages pursuant to 17 U.S.C. § 1203(b)(3) and 17 U.S.C. § 1203(c)(3),⁴³ or, in the alternative, an award of actual damages and any additional profits pursuant to 17 U.S.C. § 1203(c)(2) (including tripling damages pursuant to 17 U.S.C. § 1203(c)(4) if applicable);
 - e) An award of damages for harms resulting from Defendants' breach of Licenses;
 - f) An award of damages, including punitive damages, for harms resulting from Defendants' tortious interference in Plaintiffs' and the Class's prospective contractual relations;
 - g) An award of damages for harms resulting from Defendants' false designation of the origin of Copilot's Output;
 - h) An award of damages in the amount Defendants have been unjustly enriched

⁴³ Plaintiffs estimate that statutory damages for Defendants' direct violations of DMCA Section 1202 alone will exceed \$9,000,000,000. That figure represents minimum statutory damages (\$2,500) incurred three times for each of the 1.2 million Copilot users Microsoft reported in June 2022. Each time Copilot provides an unlawful Output it violates Section 1202 three times (distributing the Licensed Materials without: (1) attribution, (2) copyright notice, and (3) License Terms). So, if each user receives just one Output that violates Section 1202 throughout their time using Copilot (up to fifteen months for the earliest adopters), then GitHub and OpenAI have violated the DMCA 3,600,000 times. At minimum statutory damages of \$2500 per violation, that translates to \$9,000,000,000.

1 through their conduct as alleged herein as well as punitive damages in connection
2 with this conduct;

- 3 i) An award of damages, including punitive damages, for harms resulting from
4 Defendants acts of unfair competition;
- 5 j) Statutory damages and any other relief this Court deems proper for Defendants
6 violation of the CCPA;
- 7 k) An award of damages for harms resulting from GitHub's breach of the GitHub
8 Policies; and
- 9 l) An award of damages, including punitive damages, for harms resulting from
10 Defendants' negligent handling of Plaintiffs' and the Class's personal data.

11 249. Injunctive relief sufficient to alleviate and stop Defendants' unlawful conduct
12 alleged herein.

13 250. Plaintiffs and the Class are entitled to prejudgment and post-judgment interest on
14 the damages awarded them, and that such interest be awarded at the highest legal rate from and
15 after the date this class action complaint is first served on Defendants;

16 251. Defendants are to be jointly and severally responsible financially for the costs and
17 expenses of a Court approved notice program through post and media designed to give immediate
18 notification to the Class.

19 252. Plaintiffs and the Class receive such other or further relief as may be just and
20 proper.

21 / / /

22 / / /

23 / / /

X. JURY TRIAL DEMANDED

Pursuant to Federal Rule of Civil Procedure 38(b), Plaintiffs demand a trial by jury of all the claims asserted in this Complaint so triable.

Dated: November 10, 2022

By: /s/ Joseph R. Saveri
Joseph R. Saveri

Joseph R. Saveri (State Bar No. 130064)
Steven N. Williams (State Bar No. 175489)
Cadio Zirpoli (State Bar No. 179108)
Elissa A. Buchanan (State Bar No. 249996)
Travis Manfredi (State Bar No. 281779)
JOSEPH SAVERI LAW FIRM, LLP
601 California Street, Suite 1000
San Francisco, California 94108
Telephone: (415) 500-6800
Facsimile: (415) 395-9940
Email: jsaveri@saverilawfirm.com
swilliams@saverilawfirm.com
czirpoli@saverilawfirm.com
eabuchanan@saverilawfirm.com
tmanfredi@saverilawfirm.com

Matthew Butterick (State Bar No. 250953)
1920 Hillhurst Avenue, #406
Los Angeles, CA 90027
Telephone: (323) 968-2632
Facsimile: (415) 395-9940
Email: mb@buttericklaw.com

Counsel for Plaintiffs and the Proposed Class

APPENDIX A

APPENDIX A
Full Text of the Suggested Licenses

This Appendix A contains the full text of the Suggested Licenses:¹

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Any litigation relating to this License may be brought only in the courts of a jurisdiction where the defendant maintains its principal place of business and such litigation shall be governed by laws of that jurisdiction, without reference to its conflict-of-law provisions. Nothing in this Section shall prevent a party's ability to bring cross-claims or counter-claims.

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EXHIBIT 1

Exhibit 1

- GitHub Privacy Statement
- GitHub Terms of Service
- GitHub Copilot Terms from GitHub Terms for Additional Products and Features

GitHub Privacy Statement

Effective date: September 1, 2022

Thanks for entrusting GitHub Inc. or GitHub B.V. (“GitHub”, “we”, “us” or “our”) with your source code, your projects, and your personal data. This Privacy Statement explains our practices regarding the collection, use, and disclosure of your data, including any personal data we collect and process in connection with our website and any applications, software, products, and services provided by GitHub, including any Beta Previews (collectively “Service”).

All capitalized terms have their definition in [GitHub’s Terms of Service](#), unless otherwise noted here.

The short version

We use your personal information as this Privacy Statement describes. No matter where you are, where you live, or what your citizenship is, you have the same high standard of privacy protection when using GitHub’s products as all our users around the world, regardless of their country of origin or location.

To see our Privacy Notice to residents of California, please go to [GitHub’s Notice about the California Consumer Privacy Act](#) or scroll down.

Summary

| Section | What can you find there? |
|---|---|
| Who is responsible for the processing of your information | Subject to limited exceptions, GitHub is the controller and entity responsible for the processing of your personal data in connection with the Website or Service if you are in North America. For individuals outside North America the data controller is GitHub B.V. |
| What information GitHub collects | GitHub collects information directly from you for your registration, payment, transactions, and user profile. We also automatically collect from you your usage information, cookies, and device information, subject, where necessary, to your consent. GitHub may also collect personal data from third parties. We only collect the minimum amount of personal data necessary from you, unless you choose to provide more. |
| How GitHub uses your information | In this section, we describe the ways in which we use your information, including to provide you the Service, to communicate with you, for security and compliance purposes, and to improve our Website or Service or develop new features and functionality of our Website or Service. We also describe the legal basis upon which we process your information, where legally required. |

| | |
|---|---|
| Section | What can you find there? |
| How we share the information we collect | We may share your information with third parties under one of the following circumstances: with your consent, with our service providers, for security purposes, to comply with our legal obligations, or when there is a change of control or sale of corporate entities or business units. We do not sell your personal information and we do not host advertising on GitHub. |
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| Cookies | <p>Except for cookies used on our Enterprise Marketing Pages, we only use strictly necessary cookies to provide, secure, and improve our Website or Service or develop new features and functionality of our Website or Service.</p> <p>As described below, we may use non-essential cookies on certain pages of our website to support our enterprise marketing efforts and market our products and services to enterprise customers, for example on resources.github.com (collectively “Enterprise Marketing Pages”).</p> <p>We offer a page that makes all uses of cookies very transparent.</p> |
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Section What can you find there?

[Translations](#) We provide links to some translations of the Privacy Statement.

GitHub Privacy Statement

Who is responsible for the processing of your information?

The data controller of your personal data is GitHub, Inc. For individuals outside North America, the data controller is GitHub B.V.

This privacy statement does not apply to personal data we process as a service provider or data processor on behalf of our enterprise customers. Our data processing activities as service processor or data processor is governed by our [Data Protection Agreement](#). If you are a consumer end-user of one of those organizations, you should read that organization's privacy statement and direct any privacy inquiries to that organization.

GitHub acting on your behalf

In some cases, GitHub is acting only on your behalf for the personal data we collect and process in connection with our Service (for example, for the personal data added to a repository by the contributors to such repository). In such cases, GitHub will only process the data in order to provide the Service requested by you. Please note that subject to our [Private Information Removal Policy](#) contributors' requests to remove personal data generally require notice to and action from the repository owner.

What information GitHub collects

The personal data we collect depends on how you interact with us, the services you use, and the choices you make. We collect information about you from different sources and in various ways when you use our Service, including information you provide directly, information collected automatically, third-party data sources, and data we infer or generate from other data.

Information users provide directly to GitHub

We collect personal data you provide to us. For example:

Registration information

We collect information such as your username, email address, and password during account creation.

Demographic information

In some cases, we request that you provide age, gender, and similar demographic details.

Payment and billing information

If you make a purchase or other financial transaction, we collect credit card numbers, financial account information, and other payment details.

Content and files

We collect any photographs, documents, or other files you upload to our Service; and if you send us email messages or other communications, we collect and retain those communications. For example, you may choose to give us more information for your Account profile, such as your full name, an avatar which may include a photograph, your biography, your location, your company, and a URL to a third-party website. Please note that your profile information may be visible to other Users of our Service.

Information GitHub automatically collects.

When you visit or use our Service, we collect some information automatically. For example:

Transaction information

If you have a paid Account with us, or make a purchase or sale using our Service, we automatically collect certain information about your transactions on the Service, such as your full name, address, region, state, country, zip code, the date, time, and amount charged.

Usage information

If you're accessing or using our Service, we may automatically collect information about how you use the Service, such as the pages you view, the referring site, your IP address and information about your device, session information, the date and time of each request, information contained in or relating to your contributions to individual repositories, and telemetry data (i.e., information about how a specific feature or service is performing) regarding your use of other features and functionality of the Service.

Cookies

As further described below, we automatically collect information from cookies (such as cookie ID and settings) in connection with our Service.

Device information

We may collect information about your device, such as its IP address, browser or client application information, language preference, operating system and application version, device type and ID, and device model and manufacturer.

Geolocation information

In connection with certain features and depending on the functionality of the Service, we collect geolocation information such as through IP addresses or the location information you choose to provide in your Account profile.

Information we create or generate

We infer new information from other data we collect, including using automated means to generate information about your likely preferences or other characteristics (“inferences”). For example, we infer your general geographic location (such as city, state, and country) based on your IP address.

Information we collect from third parties

Other companies with whom you choose to engage. GitHub may collect personal data about you from third parties. For example, this may happen if you sign up for training or to receive information about GitHub from one of our vendors, partners, or affiliates. GitHub does not purchase personal data from third-party data brokers.

Service Providers. We may also receive information from processors or service providers who process the data on our behalf, such as our payment processor who process payment and billing information in connection with our Service.

Content you post on our Service. Information you store in, or contribute to, a public repository, provide for use in connection with a Community Feature or make otherwise publicly available through the Service will be collected by GitHub as described in this Privacy Statement. Such information may also be available to the GitHub user community as well as the general public. For more information, please review details regarding public repositories and community features [here](#).

Co-branding/marketing partners. We may receive information from partners with which we offer co-branded services or engage in joint marketing activities.

Publicly available sources. We may also obtain information from publicly available sources as GitHub repositories.

When you are asked to provide personal data, you may decline. And you may use web browser or operating system controls to prevent certain types of automatic data collection. But if you choose not to provide or allow information that is necessary for certain services or features, those services or features may not be available or fully functional.

How GitHub uses your information

We may use your information to provide, administer, analyze, manage, and operate our Service. For example, we use your information for the following purposes:

- Provide our products and deliver our services including troubleshooting, improving, and personalizing the features on the Service.
- Business operations such as billing, accounting, improving our internal operations, securing our systems, detecting fraudulent or illegal activity, and meeting our legal obligations.

- Improve and develop our products and services including to develop new services or features, and conduct research.
- Personalization of our Service by understanding you and your preferences to enhance your experience and enjoyment using our Service.
- Provide customer support and respond to your questions.
- Deliver promotional communications with you about new services, features, offers, promotions, and other information about our Service.
- Personalize and measure the effectiveness of enterprise business ads, promotional communications or marketing you receive related to the Enterprise Marketing Pages.
- Send you information, including confirmations, invoices, technical notices, updates, security alerts, support and administrative messages.

We combine data we collect from different sources for these purposes and to give you a more seamless, consistent, and personalized experience.

How we share the information we collect

We share personal data as described below, including with your consent or as necessary to complete your transactions or provide the services you have requested or authorized. In addition, we may share each of the categories of your personal data described above with the types of third parties described below for the following business purposes:

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You may select options available through our Service to publicly display and share your name and/or username and certain other information, such as your profile, demographic data, content and files, or geolocation data. For example, if you would like your email address to remain private, even when you're commenting on public repositories, [you can adjust your setting for your email address to be private in your user profile](#). You can also [update your local Git configuration to use your private email address](#). Please see more about email addresses in commit messages [here](#).

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Third-party applications

We share your personal data with third parties when you tell us to do so. For example, if you purchase an application listed on our Marketplace, we share your username to allow the application developer to provide you with services. Additionally, you may direct us through your actions on GitHub to share your personal data. For example, if you join an Organization, you indicate your willingness to provide the owner of the Organization with the ability to view your activity in the Organization's access log.

You can enable or add third-party applications, known as "Developer Products" to your Account. These Developer Products are not necessary for your use of GitHub. We will share your personal data with such third-party applications when you ask us to; however, you are responsible for your use of the third-party Developer Product and for the amount of personal data you choose to share with it. You can check our [API documentation](#) to see what information is provided when you authenticate into a Developer Product using your GitHub profile.

Organizations with which you engage

You may indicate, through your actions on GitHub, that you are willing to share your personal data. If you collaborate on or become a member of an organization, then its Account owners may receive your personal data. When you accept an invitation to an organization, you will be notified of the types of information owners may be able to see (for more information, see [About Organization Membership](#)). Please contact the Account owners for more information about how they might process your personal data in their Organization and the ways for you to access, update, alter, or delete your personal data stored in the Account.

Service providers

We share your personal data with service providers who process the information on our behalf to provide or improve our Service. For example, our service providers may perform payment processing, customer support ticketing, network data transmission, web analytics, marketing operations, security, and other similar services. While GitHub processes all personal data in the United States, our service providers may process data outside of the United States or the European Union. Such processing by service providers will be in compliance with applicable law including any relevant transfer mechanism.

Affiliates

We enable access to personal data across our subsidiaries, affiliates, and related companies, for example, where we share common data systems, when affiliates provide services on our behalf, or where access is needed to operate and provide the Service.

For security purposes

We will disclose personal data if we believe it is necessary to:

- protect our customers and others, for example to prevent spam or attempts to commit fraud, or to help prevent the loss of life or serious injury of anyone;
- operate and maintain the security of the Service, including to prevent or stop an attack on our systems or networks; or
- protect the rights or property or ourselves or others, including enforcing our agreements, terms, and policies.

For legal disclosure

GitHub may disclose personal data or other information we collect about you to law enforcement or other governmental agencies if required in response to a valid legal process. For more information about our disclosure in response to legal requests, see our [Guidelines for Legal Requests of User Data](#).

Change in control or sale

We may share your personal data if we are involved in a merger, sale, or acquisition of corporate entities or business units as described in this Privacy Statement.

Please note that some of the features on our Service include integrations, references, or links to services provided by third parties whose privacy practices differ from ours. If you provide personal data to any of those third parties, or allow us to share personal data with them, that data is governed by their privacy statements.

Finally, we may share de-identified information in accordance with applicable law.

No selling of personal data

We *do not* sell your personal data for monetary or other consideration as defined under California and Nevada state laws. You can learn more about the CCPA and how we comply with it [here](#).

Your choices regarding our processing of your personal data

We provide choices about the personal data we collect about you. The choices you make will not apply to any personal data associated with an Organization under your Account.

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your username and email address, from the author field of issues, pull requests, and comments by associating them with a ghost user. That said, the email address you have provided via your Git commit settings will always be associated with your commits in the Git system. If you choose to make your email address private, you should also update your Git commit settings. We are unable to change or delete data in the Git commit history — the Git software is designed to maintain a record — but we do enable you to control what information you put in that record.

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You can adjust the settings on your Account regarding the display of your personal data in private or public repositories or personal data processed in connection with Community Features (such as GitHub Feed, GitHub Sponsors, and GitHub Explore) through [profile settings](#).

Additionally, if you are unable to access certain personal data we have via the means described above, you can request access by contacting us as described at the bottom of this privacy statement.

Data portability

As a GitHub User, you can always take your data with you. You can [clone your repositories to your desktop](#), for example, or you can use our [Data Portability tools](#) to download information we have about you.

Communication preferences

We use your email address to communicate with you, if you've said that's okay, and only for the reasons you've said that's okay. For example, if you contact our Support team with a request, we respond to you via email. You have control over how your email address is used and shared on and through our Service. You may manage your communication preferences in your [profile](#).

By design, the Git version control system associates many actions with a user's email address, such as commit messages. See more details regarding [setting your commit email address](#).

Depending on your [email settings](#), GitHub may occasionally send notification emails, for example, about changes in a repository you're watching, new features, requests for feedback, important policy changes, or to offer customer support. We may also send marketing emails, based on your choices and in accordance with applicable laws and regulations. There's an "unsubscribe" link located at the bottom of each of the marketing emails we send you.

Please note that you cannot opt out of receiving important communications from us, such as emails from our Support team or system emails, but you can configure your notifications settings in your profile to opt out of other communications.

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If the processing of personal data about you is subject to European Union data protection law, you have certain rights with respect to that data:

You can request access to, and rectification or erasure of, personal data; If any automated processing of personal data is based on your consent or a contract with you, you have a right to transfer or receive a copy of the personal data in a usable and portable format; If the processing of personal data is based on your consent, you can withdraw consent at any time for future processing; You can to object to, or obtain a restriction of, the processing of personal data under certain circumstances; and For residents of France, you can send us specific instructions regarding the use of your data after your death.

To make such requests, please use the contact information at the bottom of this statement. When we are processing data on behalf of another party (i.e., where GitHub is acting as a data processor) you should direct your request to that party. You also have the right to lodge a complaint with a supervisory authority, but we encourage you to first contact us with any questions or concerns.

We rely on different lawful bases for collecting and processing personal data about you, for example, with your consent and/or as necessary to provide the services you use, operate our business, meet our contractual and legal obligations, protect the security of our systems and our customers, or fulfill other legitimate interests.

Our use of cookies and tracking technologies

Cookies and tracking technologies

GitHub uses cookies to provide, secure and improve our Service or to develop new features and functionality of our Service. For example, we use them to (i) keep you logged in, (ii) remember your preferences, (iii) identify your device for security and fraud purposes, including as needed to maintain the integrity of our Service, (iv) compile statistical reports, and (v) provide information and insight for future development of GitHub. We provide more information about [cookies on GitHub](#) that describes the cookies we set, the needs we have for those cookies, and the expiration of such cookies.

For Enterprise Marketing Pages, we may also use non-essential cookies to (i) gather information about enterprise users' interests and online activities to personalize their experiences, including by making the ads, content, recommendations, and marketing seen or received more relevant and (ii) serve and measure the effectiveness of targeted advertising and other marketing efforts. If you disable the non-essential cookies on the Enterprise Marketing Pages, the ads, content, and marketing you see may be less relevant.

Our emails to users may contain a pixel tag, which is a small, clear image that can tell us whether or not you have opened an email and what your IP address is. We use this pixel tag to make our email communications more effective and to make sure we are not sending you unwanted email.

The length of time a cookie will stay on your browser or device depends on whether it is a “persistent” or “session” cookie. Session cookies will only stay on your device until you stop browsing. Persistent cookies stay until they expire or are deleted. The expiration time or retention period applicable to persistent cookies depends on the purpose of the cookie collection and tool used. You may be able to delete cookie data as described [here](#).

What are cookies and similar technologies?

We use cookies and similar technologies, such as web beacons, local storage, and mobile analytics, to operate and provide our Services. When visiting Enterprise Marketing Pages, like [resources.github.com](#), these and additional cookies, like advertising IDs, may be used for sales and marketing purposes.

Cookies are small text files stored by your browser on your device. A cookie can later be read when your browser connects to a web server in the same domain that placed the cookie. The text in a cookie contains a string of numbers and letters that may uniquely identify your device and can contain other information as well. This allows the web server to recognize your browser over time, each time it connects to that web server.

Web beacons are electronic images (also called “single-pixel” or “clear GIFs”) that are contained within a website or email. When your browser opens a webpage or email that contains a web beacon, it automatically connects to the web server that hosts the image (typically operated by a third party). This allows that web server to log information about your device and to set and read its own cookies. In the same way, third-party content on our websites (such as embedded videos, plug-ins, or ads) results in your browser connecting to the third-party web server that hosts that content.

Mobile identifiers for analytics can be accessed and used by apps on mobile devices in much the same way that websites access and use cookies. When visiting Enterprise Marketing pages, like [resources.github.com](#), on a mobile device these may allow us and our third-party analytics and advertising partners to collect data for sales and marketing purposes.

We may also use so-called “flash cookies” (also known as “Local Shared Objects” or “LSOs”) to collect and store information about your use of our Services. Flash cookies are commonly used for advertisements and videos.

How do we and our partners use cookies and similar technologies?

The GitHub Services use cookies and similar technologies for a variety of purposes, including to store your preferences and settings, enable you to sign-in, analyze how our Services perform, track your interaction with the Services, develop inferences, combat fraud, and fulfill other legitimate purposes. Some of these cookies and technologies may be provided by third parties, including service providers and advertising partners. For example, our analytics and advertising partners may use these technologies in our Services to collect personal information (such as the pages you visit, the links you click on, and similar usage information, identifiers, and device

information) related to your online activities over time and across Services for various purposes, including targeted advertising. GitHub will place non-essential cookies on pages where we market products and services to enterprise customers, for example, on resources.github.com.

We and/or our partners also share the information we collect or infer with third parties for these purposes.

The table below provides additional information about how we use different types of cookies:

| Purpose | Description |
|------------------|--|
| Required Cookies | GitHub uses required cookies to perform essential website functions and to provide the services. For example, cookies are used to log you in, save your language preferences, provide a shopping cart experience, improve performance, route traffic between web servers, detect the size of your screen, determine page load times, improve user experience, and for audience measurement. These cookies are necessary for our websites to work. |
| Analytics | We allow third parties to use analytics cookies to understand how you use our websites so we can make them better. For example, cookies are used to gather information about the pages you visit and how many clicks you need to accomplish a task. We also use some analytics cookies to provide personalized advertising. |
| Social Media | GitHub and third parties use social media cookies to show you ads and content based on your social media profiles and activity on GitHub's websites. This ensures that the ads and content you see on our websites and on social media will better reflect your interests. This also enables third parties to develop and improve their products, which they may use on websites that are not owned or operated by GitHub. |
| Advertising | In addition, GitHub and third parties use advertising cookies to show you new ads based on ads you've already seen. Cookies also track which ads you click or purchases you make after clicking an ad. This is done both for payment purposes and to show you ads that are more relevant to you. For example, cookies are used to detect when you click an ad and to show you ads based on your social media interests and website browsing history. |

What are your cookie choices and controls?

You have several options to disable non-essential cookies:

1. Specifically on GitHub Enterprise Marketing Pages

Any GitHub page that serves non-essential cookies will have a link in the page's footer to cookie settings. You can express your preferences at any time by clicking on that linking and updating your settings.

Some users will also be able to manage non-essential cookies via a cookie consent banner, including the options to accept, manage, and reject all non-essential cookies.

2. Generally for all websites

You can control the cookies you encounter on the web using a variety of widely-available tools. For example:

- If your browser sends a [Do Not Track](#) (DNT) signal, GitHub will not set non-essential cookies and will not load third party resources which set non-essential cookies.
- Many browsers provide cookie controls which may limit the types of cookies you encounter online. Check out the documentation for your browser to learn more.
- If you enable a browser extension designed to block tracking, such as [Privacy Badger](#), non-essential cookies set by a website or third parties may be disabled.
- If you enable a browser extension designed to block unwanted content, such as [uBlock Origin](#), non-essential cookies will be disabled to the extent that content that sets non-essential cookies will be blocked.
- Advertising controls. Our advertising partners may participate in associations that provide simple ways to opt out of ad targeting, which you can access at:
 - United States: [NAI](#) and [DAA](#)
 - Canada: [Digital Advertising Alliance of Canada](#)
 - Europe: [European Digital Advertising Alliance](#)

These choices are specific to the browser you are using. If you access our Services from other devices or browsers, take these actions from those systems to ensure your choices apply to the data collected when you use those systems.

Retention of personal data

We retain personal data for as long as necessary to provide the services and fulfill the transactions you have requested, comply with our legal obligations, resolve disputes, enforce our agreements, and other legitimate and lawful business purposes. Because these needs can vary for different data types in the context of different services, actual retention periods can vary significantly based on criteria such as user expectations or consent, the sensitivity of the data, the availability of automated controls that enable users to delete data, and our legal or contractual obligations. For example, we may retain your personal data for longer periods, where necessary, subject to applicable law, for security purposes.

How GitHub secures your information

GitHub takes reasonable measures necessary to protect your personal data from unauthorized access, alteration, or destruction; maintain data accuracy; and help ensure the appropriate use of your personal data. To help us protect personal data, we request that you use a strong password and never share your password with anyone or use the same password with other sites or accounts.

In addition, if your account has private repositories, you control the access to that Content. GitHub personnel does not access private repository content except for

- security purposes,
- automated scanning for known vulnerabilities, active malware, or other content known to violate our Terms of Service
- to assist the repository owner with a support matter
- to maintain the integrity of the Service
- to comply with our legal obligations if we have reason to believe the contents are in violation of the law,
- or with your consent.

GitHub will provide notice regarding private repository access where not prohibited by law or if in response to a security threat or other risk to security.

Cross-border data transfers

GitHub processes personal data both inside and outside of the United States and relies on legal mechanisms such as Standard Contractual Clauses to lawfully transfer data from the European Economic Area, the United Kingdom, and Switzerland to the United States. You may request a copy of the Standard Contractual Clauses using the contact details provided in the section entitled “Contacting GitHub” below.

Resolving complaints

If you have concerns about the way GitHub is handling your personal data, please let us know immediately. We want to help. You may contact us by filling out the [Privacy contact form](#). You may also email us directly at **(privacy [at] github [dot] com)** with the subject line “Privacy Concerns.” We will respond promptly — within 45 days at the latest.

You may also contact our Data Protection Officer directly at **github [at]dp-officer [dot] com**

If you are in North America:

GitHub Data Protection Officer
88 Colin P. Kelly Jr. St.
San Francisco, CA 94107

United States

privacy [at] github [dot] com

If you are outside of North America:

GitHub Data Protection Officer

c/o DP Dock DPO Services GmbH,

Attn: GitHub BV, Gut Projensdorf,

24161 Altenholz, Germany

github@dp-officer.com cc: **privacy [at] github [dot] com**

CC: GitHub BV, Vijzelstraat 68-72, 1017 HL Amsterdam, The Netherlands

Dispute resolution process

In the unlikely event that a dispute arises between you and GitHub regarding our handling of your User Personal Information, we will do our best to resolve it. Additionally, if you are a resident of an EU member state, you have the right to file a complaint with your local supervisory authority, and you might have more [options](#).

Changes to our Privacy Statement

Although most changes are likely to be minor, GitHub may change our Privacy Statement from time to time. We will provide notification to Users of material changes to this Privacy Statement through our Website at least 30 days prior to the change taking effect by posting a notice on our home page or sending email to the primary email address specified in your GitHub account. We will also update our [Site Policy repository](#), which tracks all changes to this policy. For other changes to this Privacy Statement, we encourage Users to [watch](#) or to check our Site Policy repository frequently.

License

This Privacy Statement is licensed under this [Creative Commons Zero license](#). For details, see our [site-policy repository](#).

Contacting GitHub

Questions regarding GitHub's Privacy Statement or information practices should be directed to our [Privacy contact form](#).

Translations

Below are translations of this document into other languages. In the event of any conflict, uncertainty, or apparent inconsistency between any of those versions and the English version, this English version is the controlling version.

French

Cliquez ici pour obtenir la version française: [Déclaration de confidentialité de GitHub](#)

Other translations

For translations of this statement into other languages, please visit <https://docs.github.com/> and select a language from the drop-down menu under “English.”

GitHub’s notice to California residents

The [California Consumer Privacy Act](#) of 2018, (Cal. Civ. Code §1798.100 et seq., as amended, “CCPA”) gives California residents rights and control over their personal information. GitHub, Inc. (“GitHub”, “we”) provides this statement to those residents (“you”) in accordance with requirements under the CCPA to make certain disclosures about the collection and processing of their personal information. This is GitHub’s California-specific description of consumers’ privacy rights under the CCPA. For information about how we’ve extended the CCPA core rights to control personal information to all of our users in the United States, please see our [Privacy Statement](#).

Our handling of personal information

While the table below contains information about the categories of personal information we collect, process, and share, please see the [GitHub Privacy Statement](#) for full details.

| Category of personal information collected in last 12 months | Category of sources from which the personal information has been collected |
|--|--|
| Identifiers (such as real name, alias, postal address, unique personal identifier, online identifier Internet Protocol address, email address, account name, or other similar identifiers) | Information consumer provides directly or automatically through their interaction with our Service and/or Website or GitHub’s vendors, partners, or affiliates |
| Personal information described in Cal. Civ. Code §1798.80 (e) such as name, address, credit card or debit card number) | Information consumer may choose to provide directly, through service providers |
| Characteristics of protected classifications under California or federal law (such as gender) | Information consumer may choose to provide directly |
| Commercial information (such as about products or services purchased, obtained, or considered, or other purchasing or consuming histories or tendencies) | Information consumer provides directly or automatically through their interaction with our Services |
| Geolocation data (such as any information collected after giving users the opportunity to opt-in to location-based | Information consumer provides automatically through their interaction with our Services |

| Category of personal information collected in last 12 months | Category of sources from which the personal information has been collected |
|--|---|
| services, which rely upon a device's precise location services.) | |
| Audio, electronic, visual, or similar information such as content and files uploaded to the Service. | Information consumer may choose to provide directly |
| Professional or employment information | Information consumer may choose to provide directly |
| Inferences drawn from any of the information identified in this table to create a profile about a consumer reflecting the consumer's preferences | Information consumer provides directly or automatically through their interaction with our Services |

We use the categories of personal information described above for the purposes listed in the [“How GitHub uses your information”](#) section of our Privacy Statement. We also disclose the categories of personal information listed above for business purposes. Please see the [“How we share the information we collect”](#) section of our Privacy Statement for additional details.

We do not sell your personal information

Under the CCPA, a business that sells California residents' personal information to others: 1) must give notice to California residents before selling their personal information to others; and 2) must provide the right to opt out of the sale of their personal information. GitHub does not sell personal information, including personal information of anyone under 16 years old.

Your rights under the CCPA

The CCPA provides California residents with certain rights related to their personal information. To submit a request based on these rights, please contact us via our [contact form](#).

When receiving a request, we will verify that the individual making the request is the resident to whom the personal information subject to the request pertains. California residents may exercise their rights themselves or may use an authorized agent, designated in writing or through a power of attorney, to make requests on their behalf. If you use an authorized agent to submit a request, we may require that you provide us additional information demonstrating that the agent is acting on your behalf, and we may need you to verify your identity directly with us. With respect to your personal information, California residents may exercise the rights described below.

Right to Know.

You have a right to request that we disclose to you the personal information we have collected about you. You also have a right to request additional information about our collection, use,

disclosure, or sale of such personal information. Note that we have provided much of this information in this privacy statement. You can use GitHub’s User Migration tool to access and download your data. Learn more [here](#). You may also make such a “request to know” by contacting us [here](#).

Right to Request Deletion.

You also have a right to request that we delete personal information under certain circumstances, subject to a number of exceptions. To make a request to delete, you can contact us [here](#) or use the account settings [here](#).

Right to Opt-Out.

You have a right to opt-out from future “sales” of personal information. Note that we do not “sell” personal information as defined by the CCPA and have not done so in the past 12 months.

Right to Non-Discrimination.

You have a right to not be discriminated against for exercising your CCPA rights. We will not discriminate against you for exercising your CCPA rights.

You may designate, in writing or through a power of attorney, an authorized agent to make requests on your behalf to exercise your rights under the CCPA. Before accepting such a request from an agent, we will require the agent to provide proof you have authorized it to act on your behalf, and we may need you to verify your identity directly with us. Further, to provide or delete specific pieces of personal information we will need to verify your identity to the degree of certainty required by law. We will verify your request by asking you to submit the request from the email address associated with your account or requiring you to provide information necessary to verify your account. [Please note that you may use two-factor authentication with your GitHub account.](#)

Finally, you have a right to receive notice of our practices at or before collection of personal information.

Additionally, under California Civil Code section 1798.83, also known as the “Shine the Light” law, California residents who have provided personal information to a business with which the individual has established a business relationship for personal, family, or household purposes (“California Customers”) may request information about whether the business has disclosed personal information to any third parties for the third parties’ direct marketing purposes. Please be aware that we do not disclose personal information to any third parties for their direct marketing purposes as defined by this law. California Customers may request further information about our compliance with this law by emailing (**privacy [at] github [dot] com**). Please note that businesses are required to respond to one request per California Customer each year and may not be required to respond to requests made by means other than through the designated email address.

California residents under the age of 18 who are registered users of online sites, services, or applications have a right under California Business and Professions Code Section 22581 to remove, or request and obtain removal of, content or information they have publicly posted. To remove content or information you have publicly posted, [please submit a Private Information Removal request](#). Alternatively, to request that we remove such content or information, please send a detailed description of the specific content or information you wish to have removed to [GitHub support](#). Please be aware that your request does not guarantee complete or comprehensive removal of content or information posted online and that the law may not permit or require removal in certain circumstances. If you have any questions about our privacy practices with respect to California residents, please contact us via our [contact form](#).

GitHub Terms of Service

Thank you for using GitHub! We're happy you're here. Please read this Terms of Service agreement carefully before accessing or using GitHub. Because it is such an important contract between us and our users, we have tried to make it as clear as possible. For your convenience, we have presented these terms in a short non-binding summary followed by the full legal terms.

Summary

| | |
|---|---|
| Section | What can you find there? |
| A. Definitions | Some basic terms, defined in a way that will help you understand this agreement. Refer back up to this section for clarification. |
| B. Account Terms | These are the basic requirements of having an Account on GitHub. |
| C. Acceptable Use | These are the basic rules you must follow when using your GitHub Account. |
| D. User-Generated Content | You own the content you post on GitHub. However, you have some responsibilities regarding it, and we ask you to grant us some rights so we can provide services to you. |
| E. Private Repositories | This section talks about how GitHub will treat content you post in private repositories. |
| F. Copyright & DMCA Policy | This section talks about how GitHub will respond if you believe someone is infringing your copyrights on GitHub. |
| G. Intellectual Property Notice | This describes GitHub's rights in the website and service. |
| H. API Terms | These are the rules for using GitHub's APIs, whether you are using the API for development or data collection. |
| I. Additional Product Terms | We have a few specific rules for GitHub's features and products. |
| J. Beta Previews | These are some of the additional terms that apply to GitHub's features that are still in development. |
| K. Payment | You are responsible for payment. We are responsible for billing you accurately. |
| L. Cancellation and Termination | You may cancel this agreement and close your Account at any time. |

| | |
|--|---|
| Section | What can you find there? |
| M. Communications with GitHub | We only use email and other electronic means to stay in touch with our users. We do not provide phone support. |
| N. Disclaimer of Warranties | We provide our service as is, and we make no promises or guarantees about this service. Please read this section carefully; you should understand what to expect. |
| O. Limitation of Liability | We will not be liable for damages or losses arising from your use or inability to use the service or otherwise arising under this agreement. Please read this section carefully; it limits our obligations to you. |
| P. Release and Indemnification | You are fully responsible for your use of the service. |
| Q. Changes to these Terms of Service | We may modify this agreement, but we will give you 30 days' notice of material changes. |
| R. Miscellaneous | Please see this section for legal details including our choice of law. |

The GitHub Terms of Service

Effective date: November 16, 2020

A. Definitions

Short version: *We use these basic terms throughout the agreement, and they have specific meanings. You should know what we mean when we use each of the terms. There's not going to be a test on it, but it's still useful information.*

1. An "Account" represents your legal relationship with GitHub. A "Personal Account" represents an individual User's authorization to log in to and use the Service and serves as a User's identity on GitHub. "Organizations" are shared workspaces that may be associated with a single entity or with one or more Users where multiple Users can collaborate across many projects at once. A Personal Account can be a member of any number of Organizations.
2. The "Agreement" refers, collectively, to all the terms, conditions, notices contained or referenced in this document (the "Terms of Service" or the "Terms") and all other operating rules, policies (including the GitHub Privacy Statement, available at github.com/site/privacy) and procedures that we may publish from time to time on the Website. Most of our site policies are available at docs.github.com/categories/site-policy.
3. "Beta Previews" mean software, services, or features identified as alpha, beta, preview, early access, or evaluation, or words or phrases with similar meanings.

4. “Content” refers to content featured or displayed through the Website, including without limitation code, text, data, articles, images, photographs, graphics, software, applications, packages, designs, features, and other materials that are available on the Website or otherwise available through the Service. “Content” also includes Services. “User-Generated Content” is Content, written or otherwise, created or uploaded by our Users. “Your Content” is Content that you create or own.
5. “GitHub,” “We,” and “Us” refer to GitHub, Inc., as well as our affiliates, directors, subsidiaries, contractors, licensors, officers, agents, and employees.
6. The “Service” refers to the applications, software, products, and services provided by GitHub, including any Beta Previews.
7. “The User,” “You,” and “Your” refer to the individual person, company, or organization that has visited or is using the Website or Service; that accesses or uses any part of the Account; or that directs the use of the Account in the performance of its functions. A User must be at least 13 years of age. Special terms may apply for business or government Accounts (See [Section B\(5\): Additional Terms](#)).
8. The “Website” refers to GitHub’s website located at github.com, and all content, services, and products provided by GitHub at or through the Website. It also refers to GitHub-owned subdomains of github.com, such as education.github.com and pages.github.com. These Terms also govern GitHub’s conference websites, such as githubuniverse.com, and product websites, such as atom.io. Occasionally, websites owned by GitHub may provide different or additional terms of service. If those additional terms conflict with this Agreement, the more specific terms apply to the relevant page or service.

B. Account Terms

Short version: *Personal Accounts and Organizations have different administrative controls; a human must create your Account; you must be 13 or over; you must provide a valid email address; and you may not have more than one free Account. You alone are responsible for your Account and anything that happens while you are signed in to or using your Account. You are responsible for keeping your Account secure.*

1. Account Controls

- Users. Subject to these Terms, you retain ultimate administrative control over your Personal Account and the Content within it.
- Organizations. The “owner” of an Organization that was created under these Terms has ultimate administrative control over that Organization and the Content within it. Within the Service, an owner can manage User access to the Organization’s data and projects. An Organization may have multiple owners, but there must be at least one Personal Account designated as an owner of an Organization. If you are the owner of an Organization under

these Terms, we consider you responsible for the actions that are performed on or through that Organization.

2. Required Information

You must provide a valid email address in order to complete the signup process. Any other information requested, such as your real name, is optional, unless you are accepting these terms on behalf of a legal entity (in which case we need more information about the legal entity) or if you opt for a [paid Account](#), in which case additional information will be necessary for billing purposes.

3. Account Requirements

We have a few simple rules for Personal Accounts on GitHub's Service.

- You must be a human to create an Account. Accounts registered by "bots" or other automated methods are not permitted. We do permit machine accounts:
- A machine account is an Account set up by an individual human who accepts the Terms on behalf of the Account, provides a valid email address, and is responsible for its actions. A machine account is used exclusively for performing automated tasks. Multiple users may direct the actions of a machine account, but the owner of the Account is ultimately responsible for the machine's actions. You may maintain no more than one free machine account in addition to your free Personal Account.
- One person or legal entity may maintain no more than one free Account (if you choose to control a machine account as well, that's fine, but it can only be used for running a machine).
- You must be age 13 or older. While we are thrilled to see brilliant young coders get excited by learning to program, we must comply with United States law. GitHub does not target our Service to children under 13, and we do not permit any Users under 13 on our Service. If we learn of any User under the age of 13, we will [terminate that User's Account immediately](#). If you are a resident of a country outside the United States, your country's minimum age may be older; in such a case, you are responsible for complying with your country's laws.
- Your login may only be used by one person — i.e., a single login may not be shared by multiple people. A paid Organization may only provide access to as many Personal Accounts as your subscription allows.
- You may not use GitHub in violation of export control or sanctions laws of the United States or any other applicable jurisdiction. You may not use GitHub if you are or are working on behalf of a [Specially Designated National \(SDN\)](#) or a person subject to similar blocking or denied party prohibitions administered by a U.S. government agency. GitHub may allow persons in certain sanctioned countries or territories to access certain GitHub

services pursuant to U.S. government authorizations. For more information, please see our [Export Controls policy](#).

4. Account Security

You are responsible for keeping your Account secure while you use our Service. We offer tools such as two-factor authentication to help you maintain your Account's security, but the content of your Account and its security are up to you.

- You are responsible for all content posted and activity that occurs under your Account (even when content is posted by others who have Accounts under your Account).
- You are responsible for maintaining the security of your Account and password. GitHub cannot and will not be liable for any loss or damage from your failure to comply with this security obligation.
- You will promptly [notify GitHub](#) if you become aware of any unauthorized use of, or access to, our Service through your Account, including any unauthorized use of your password or Account.

5. Additional Terms

In some situations, third parties' terms may apply to your use of GitHub. For example, you may be a member of an organization on GitHub with its own terms or license agreements; you may download an application that integrates with GitHub; or you may use GitHub to authenticate to another service. Please be aware that while these Terms are our full agreement with you, other parties' terms govern their relationships with you.

If you are a government User or otherwise accessing or using any GitHub Service in a government capacity, this [Government Amendment to GitHub Terms of Service](#) applies to you, and you agree to its provisions.

If you have signed up for GitHub Enterprise Cloud, the [Enterprise Cloud Addendum](#) applies to you, and you agree to its provisions.

C. Acceptable Use

Short version: *GitHub hosts a wide variety of collaborative projects from all over the world, and that collaboration only works when our users are able to work together in good faith. While using the service, you must follow the terms of this section, which include some restrictions on content you can post, conduct on the service, and other limitations. In short, be excellent to each other.*

Your use of the Website and Service must not violate any applicable laws, including copyright or trademark laws, export control or sanctions laws, or other laws in your jurisdiction. You are responsible for making sure that your use of the Service is in compliance with laws and any applicable regulations.

You agree that you will not under any circumstances violate our [Acceptable Use Policies](#) or [Community Guidelines](#).

D. User-Generated Content

Short version: *You own content you create, but you allow us certain rights to it, so that we can display and share the content you post. You still have control over your content, and responsibility for it, and the rights you grant us are limited to those we need to provide the service. We have the right to remove content or close Accounts if we need to.*

1. Responsibility for User-Generated Content

You may create or upload User-Generated Content while using the Service. You are solely responsible for the content of, and for any harm resulting from, any User-Generated Content that you post, upload, link to or otherwise make available via the Service, regardless of the form of that Content. We are not responsible for any public display or misuse of your User-Generated Content.

2. GitHub May Remove Content

We have the right to refuse or remove any User-Generated Content that, in our sole discretion, violates any laws or [GitHub terms or policies](#). User-Generated Content displayed on GitHub Mobile may be subject to mobile app stores' additional terms.

3. Ownership of Content, Right to Post, and License Grants

You retain ownership of and responsibility for Your Content. If you're posting anything you did not create yourself or do not own the rights to, you agree that you are responsible for any Content you post; that you will only submit Content that you have the right to post; and that you will fully comply with any third party licenses relating to Content you post.

Because you retain ownership of and responsibility for Your Content, we need you to grant us — and other GitHub Users — certain legal permissions, listed in Sections D.4 — D.7. These license grants apply to Your Content. If you upload Content that already comes with a license granting GitHub the permissions we need to run our Service, no additional license is required. You understand that you will not receive any payment for any of the rights granted in Sections D.4 — D.7. The licenses you grant to us will end when you remove Your Content from our servers, unless other Users have forked it.

4. License Grant to Us

We need the legal right to do things like host Your Content, publish it, and share it. You grant us and our legal successors the right to store, archive, parse, and display Your Content, and make incidental copies, as necessary to provide the Service, including improving the Service over time. This license includes the right to do things like copy it to our database and make backups; show it

to you and other users; parse it into a search index or otherwise analyze it on our servers; share it with other users; and perform it, in case Your Content is something like music or video.

This license does not grant GitHub the right to sell Your Content. It also does not grant GitHub the right to otherwise distribute or use Your Content outside of our provision of the Service, except that as part of the right to archive Your Content, GitHub may permit our partners to store and archive Your Content in public repositories in connection with the [GitHub Arctic Code Vault and GitHub Archive Program](#).

5. License Grant to Other Users

Any User-Generated Content you post publicly, including issues, comments, and contributions to other Users' repositories, may be viewed by others. By setting your repositories to be viewed publicly, you agree to allow others to view and "fork" your repositories (this means that others may make their own copies of Content from your repositories in repositories they control).

If you set your pages and repositories to be viewed publicly, you grant each User of GitHub a nonexclusive, worldwide license to use, display, and perform Your Content through the GitHub Service and to reproduce Your Content solely on GitHub as permitted through GitHub's functionality (for example, through forking). You may grant further rights if you [adopt a license](#). If you are uploading Content you did not create or own, you are responsible for ensuring that the Content you upload is licensed under terms that grant these permissions to other GitHub Users.

6. Contributions Under Repository License

Whenever you add Content to a repository containing notice of a license, you license that Content under the same terms, and you agree that you have the right to license that Content under those terms. If you have a separate agreement to license that Content under different terms, such as a contributor license agreement, that agreement will supersede.

Isn't this just how it works already? Yep. This is widely accepted as the norm in the open-source community; it's commonly referred to by the shorthand "inbound=outbound". We're just making it explicit.

7. Moral Rights

You retain all moral rights to Your Content that you upload, publish, or submit to any part of the Service, including the rights of integrity and attribution. However, you waive these rights and agree not to assert them against us, to enable us to reasonably exercise the rights granted in Section D.4, but not otherwise.

To the extent this agreement is not enforceable by applicable law, you grant GitHub the rights we need to use Your Content without attribution and to make reasonable adaptations of Your Content as necessary to render the Website and provide the Service.

E. Private Repositories

Short version: *We treat the content of private repositories as confidential, and we only access it as described in our Privacy Statement—for security purposes, to assist the repository owner with a support matter, to maintain the integrity of the Service, to comply with our legal obligations, if we have reason to believe the contents are in violation of the law, or with your consent.*

1. Control of Private Repositories

Some Accounts may have private repositories, which allow the User to control access to Content.

2. Confidentiality of Private Repositories

GitHub considers the contents of private repositories to be confidential to you. GitHub will protect the contents of private repositories from unauthorized use, access, or disclosure in the same manner that we would use to protect our own confidential information of a similar nature and in no event with less than a reasonable degree of care.

3. Access

GitHub personnel may only access the content of your private repositories in the situations described in our [Privacy Statement](#).

You may choose to enable additional access to your private repositories. For example:

- You may enable various GitHub services or features that require additional rights to Your Content in private repositories. These rights may vary depending on the service or feature, but GitHub will continue to treat your private repository Content as confidential. If those services or features require rights in addition to those we need to provide the GitHub Service, we will provide an explanation of those rights.

Additionally, we may be [compelled by law](#) to disclose the contents of your private repositories.

GitHub will provide notice regarding our access to private repository content, unless [for legal disclosure](#), to comply with our legal obligations, or where otherwise bound by requirements under law, for automated scanning, or if in response to a security threat or other risk to security.

F. Copyright Infringement and DMCA Policy

If you believe that content on our website violates your copyright, please contact us in accordance with our [Digital Millennium Copyright Act Policy](#). If you are a copyright owner and you believe that content on GitHub violates your rights, please contact us via [our convenient DMCA form](#) or by emailing copyright@github.com. There may be legal consequences for sending a false or frivolous takedown notice. Before sending a takedown request, you must consider legal uses such as fair use and licensed uses.

We will terminate the Accounts of [repeat infringers](#) of this policy.

G. Intellectual Property Notice

Short version: *We own the service and all of our content. In order for you to use our content, we give you certain rights to it, but you may only use our content in the way we have allowed.*

1. GitHub's Rights to Content

GitHub and our licensors, vendors, agents, and/or our content providers retain ownership of all intellectual property rights of any kind related to the Website and Service. We reserve all rights that are not expressly granted to you under this Agreement or by law. The look and feel of the Website and Service is copyright © GitHub, Inc. All rights reserved. You may not duplicate, copy, or reuse any portion of the HTML/CSS, Javascript, or visual design elements or concepts without express written permission from GitHub.

2. GitHub Trademarks and Logos

If you'd like to use GitHub's trademarks, you must follow all of our trademark guidelines, including those on our logos page: <https://github.com/logos>.

3. License to GitHub Policies

This Agreement is licensed under this [Creative Commons Zero license](#). For details, see our [site-policy repository](#).

H. API Terms

Short version: *You agree to these Terms of Service, plus this Section H, when using any of GitHub's APIs (Application Provider Interface), including use of the API through a third party product that accesses GitHub.*

Abuse or excessively frequent requests to GitHub via the API may result in the temporary or permanent suspension of your Account's access to the API. GitHub, in our sole discretion, will determine abuse or excessive usage of the API. We will make a reasonable attempt to warn you via email prior to suspension.

You may not share API tokens to exceed GitHub's rate limitations.

You may not use the API to download data or Content from GitHub for spamming purposes, including for the purposes of selling GitHub users' personal information, such as to recruiters, headhunters, and job boards.

All use of the GitHub API is subject to these Terms of Service and the [GitHub Privacy Statement](#).

GitHub may offer subscription-based access to our API for those Users who require high-throughput access or access that would result in resale of GitHub's Service.

I. GitHub Additional Product Terms

Short version: *You need to follow certain specific terms and conditions for GitHub's various features and products, and you agree to the Supplemental Terms and Conditions when you agree to this Agreement.*

Some Service features may be subject to additional terms specific to that feature or product as set forth in the GitHub Additional Product Terms. By accessing or using the Services, you also agree to the [GitHub Additional Product Terms](#).

J. Beta Previews

Short version: *Beta Previews may not be supported or may change at any time. You may receive confidential information through those programs that must remain confidential while the program is private. We'd love your feedback to make our Beta Previews better.*

1. Subject to Change

Beta Previews may not be supported and may be changed at any time without notice. In addition, Beta Previews are not subject to the same security measures and auditing to which the Service has been and is subject. **By using a Beta Preview, you use it at your own risk.**

2. Confidentiality

As a user of Beta Previews, you may get access to special information that isn't available to the rest of the world. Due to the sensitive nature of this information, it's important for us to make sure that you keep that information secret.

Confidentiality Obligations. You agree that any non-public Beta Preview information we give you, such as information about a private Beta Preview, will be considered GitHub's confidential information (collectively, "Confidential Information"), regardless of whether it is marked or identified as such. You agree to only use such Confidential Information for the express purpose of testing and evaluating the Beta Preview (the "Purpose"), and not for any other purpose. You should use the same degree of care as you would with your own confidential information, but no less than reasonable precautions to prevent any unauthorized use, disclosure, publication, or dissemination of our Confidential Information. You promise not to disclose, publish, or disseminate any Confidential Information to any third party, unless we don't otherwise prohibit or restrict such disclosure (for example, you might be part of a GitHub-organized group discussion about a private Beta Preview feature).

Exceptions. Confidential Information will not include information that is: (a) or becomes publicly available without breach of this Agreement through no act or inaction on your part (such as when a private Beta Preview becomes a public Beta Preview); (b) known to you before we disclose it to you; (c) independently developed by you without breach of any confidentiality obligation to us or any third party; or (d) disclosed with permission from GitHub. You will not violate the terms of this Agreement if you are required to disclose Confidential Information pursuant to operation of law, provided GitHub has been given reasonable advance written notice to object, unless prohibited by law.

3. Feedback

We're always trying to improve our products and services, and your feedback as a Beta Preview user will help us do that. If you choose to give us any ideas, know-how, algorithms, code contributions, suggestions, enhancement requests, recommendations or any other feedback for our products or services (collectively, "Feedback"), you acknowledge and agree that GitHub will have a royalty-free, fully paid-up, worldwide, transferable, sub-licensable, irrevocable and perpetual license to implement, use, modify, commercially exploit and/or incorporate the Feedback into our products, services, and documentation.

K. Payment

Short version: *You are responsible for any fees associated with your use of GitHub. We are responsible for communicating those fees to you clearly and accurately, and letting you know well in advance if those prices change.*

1. Pricing

Our pricing and payment terms are available at github.com/pricing. If you agree to a subscription price, that will remain your price for the duration of the payment term; however, prices are subject to change at the end of a payment term.

2. Upgrades, Downgrades, and Changes

- We will immediately bill you when you upgrade from the free plan to any paying plan.
- If you change from a monthly billing plan to a yearly billing plan, GitHub will bill you for a full year at the next monthly billing date.
- If you upgrade to a higher level of service, we will bill you for the upgraded plan immediately.
- You may change your level of service at any time by [choosing a plan option](#) or going into your [Billing settings](#). If you choose to downgrade your Account, you may lose access to Content, features, or capacity of your Account. Please see our section on [Cancellation](#) for information on getting a copy of that Content.

3. Billing Schedule; No Refunds

Payment Based on Plan For monthly or yearly payment plans, the Service is billed in advance on a monthly or yearly basis respectively and is non-refundable. There will be no refunds or credits for partial months of service, downgrade refunds, or refunds for months unused with an open Account; however, the service will remain active for the length of the paid billing period. In order to treat everyone equally, no exceptions will be made.

Payment Based on Usage Some Service features are billed based on your usage. A limited quantity of these Service features may be included in your plan for a limited term without

additional charge. If you choose to purchase paid Service features beyond the quantity included in your plan, you pay for those Service features based on your actual usage in the preceding month. Monthly payment for these purchases will be charged on a periodic basis in arrears. See [GitHub Additional Product Terms for Details](#).

Invoicing For invoiced Users, User agrees to pay the fees in full, up front without deduction or setoff of any kind, in U.S. Dollars. User must pay the fees within thirty (30) days of the GitHub invoice date. Amounts payable under this Agreement are non-refundable, except as otherwise provided in this Agreement. If User fails to pay any fees on time, GitHub reserves the right, in addition to taking any other action at law or equity, to (i) charge interest on past due amounts at 1.0% per month or the highest interest rate allowed by law, whichever is less, and to charge all expenses of recovery, and (ii) terminate the applicable order form. User is solely responsible for all taxes, fees, duties and governmental assessments (except for taxes based on GitHub's net income) that are imposed or become due in connection with this Agreement.

4. Authorization

By agreeing to these Terms, you are giving us permission to charge your on-file credit card, PayPal account, or other approved methods of payment for fees that you authorize for GitHub.

5. Responsibility for Payment

You are responsible for all fees, including taxes, associated with your use of the Service. By using the Service, you agree to pay GitHub any charge incurred in connection with your use of the Service. If you dispute the matter, contact [GitHub Support](#). You are responsible for providing us with a valid means of payment for paid Accounts. Free Accounts are not required to provide payment information.

L. Cancellation and Termination

Short version: *You may close your Account at any time. If you do, we'll treat your information responsibly.*

1. Account Cancellation

It is your responsibility to properly cancel your Account with GitHub. You can [cancel your Account at any time](#) by going into your Settings in the global navigation bar at the top of the screen. The Account screen provides a simple, no questions asked cancellation link. We are not able to cancel Accounts in response to an email or phone request.

2. Upon Cancellation

We will retain and use your information as necessary to comply with our legal obligations, resolve disputes, and enforce our agreements, but barring legal requirements, we will delete your full profile and the Content of your repositories within 90 days of cancellation or termination (though

some information may remain in encrypted backups). This information can not be recovered once your Account is cancelled.

We will not delete Content that you have contributed to other Users' repositories or that other Users have forked.

Upon request, we will make a reasonable effort to provide an Account owner with a copy of your lawful, non-infringing Account contents after Account cancellation, termination, or downgrade. You must make this request within 90 days of cancellation, termination, or downgrade.

3. GitHub May Terminate

GitHub has the right to suspend or terminate your access to all or any part of the Website at any time, with or without cause, with or without notice, effective immediately. GitHub reserves the right to refuse service to anyone for any reason at any time.

4. Survival

All provisions of this Agreement which, by their nature, should survive termination *will* survive termination — including, without limitation: ownership provisions, warranty disclaimers, indemnity, and limitations of liability.

M. Communications with GitHub

Short version: *We use email and other electronic means to stay in touch with our users.*

1. Electronic Communication Required

For contractual purposes, you (1) consent to receive communications from us in an electronic form via the email address you have submitted or via the Service; and (2) agree that all Terms of Service, agreements, notices, disclosures, and other communications that we provide to you electronically satisfy any legal requirement that those communications would satisfy if they were on paper. This section does not affect your non-waivable rights.

2. Legal Notice to GitHub Must Be in Writing

Communications made through email or GitHub Support's messaging system will not constitute legal notice to GitHub or any of its officers, employees, agents or representatives in any situation where notice to GitHub is required by contract or any law or regulation. Legal notice to GitHub must be in writing and [served on GitHub's legal agent](#).

3. No Phone Support

GitHub only offers support via email, in-Service communications, and electronic messages. We do not offer telephone support.

N. Disclaimer of Warranties

Short version: *We provide our service as is, and we make no promises or guarantees about this service. Please read this section carefully; you should understand what to expect.*

GitHub provides the Website and the Service “as is” and “as available,” without warranty of any kind. Without limiting this, we expressly disclaim all warranties, whether express, implied or statutory, regarding the Website and the Service including without limitation any warranty of merchantability, fitness for a particular purpose, title, security, accuracy and non-infringement.

GitHub does not warrant that the Service will meet your requirements; that the Service will be uninterrupted, timely, secure, or error-free; that the information provided through the Service is accurate, reliable or correct; that any defects or errors will be corrected; that the Service will be available at any particular time or location; or that the Service is free of viruses or other harmful components. You assume full responsibility and risk of loss resulting from your downloading and/or use of files, information, content or other material obtained from the Service.

O. Limitation of Liability

Short version: *We will not be liable for damages or losses arising from your use or inability to use the service or otherwise arising under this agreement. Please read this section carefully; it limits our obligations to you.*

You understand and agree that we will not be liable to you or any third party for any loss of profits, use, goodwill, or data, or for any incidental, indirect, special, consequential or exemplary damages, however arising, that result from

- the use, disclosure, or display of your User-Generated Content;
- your use or inability to use the Service;
- any modification, price change, suspension or discontinuance of the Service;
- the Service generally or the software or systems that make the Service available;
- unauthorized access to or alterations of your transmissions or data;
- statements or conduct of any third party on the Service;
- any other user interactions that you input or receive through your use of the Service; or
- any other matter relating to the Service.

Our liability is limited whether or not we have been informed of the possibility of such damages, and even if a remedy set forth in this Agreement is found to have failed of its essential purpose. We will have no liability for any failure or delay due to matters beyond our reasonable control.

P. Release and Indemnification

Short version: *You are responsible for your use of the service. If you harm someone else or get into a dispute with someone else, we will not be involved.*

If you have a dispute with one or more Users, you agree to release GitHub from any and all claims, demands and damages (actual and consequential) of every kind and nature, known and unknown, arising out of or in any way connected with such disputes.

You agree to indemnify us, defend us, and hold us harmless from and against any and all claims, liabilities, and expenses, including attorneys' fees, arising out of your use of the Website and the Service, including but not limited to your violation of this Agreement, provided that GitHub (1) promptly gives you written notice of the claim, demand, suit or proceeding; (2) gives you sole control of the defense and settlement of the claim, demand, suit or proceeding (provided that you may not settle any claim, demand, suit or proceeding unless the settlement unconditionally releases GitHub of all liability); and (3) provides to you all reasonable assistance, at your expense.

Q. Changes to These Terms

Short version: *We want our users to be informed of important changes to our terms, but some changes aren't that important — we don't want to bother you every time we fix a typo. So while we may modify this agreement at any time, we will notify users of any material changes and give you time to adjust to them.*

We reserve the right, at our sole discretion, to amend these Terms of Service at any time and will update these Terms of Service in the event of any such amendments. We will notify our Users of material changes to this Agreement, such as price increases, at least 30 days prior to the change taking effect by posting a notice on our Website or sending email to the primary email address specified in your GitHub account. Customer's continued use of the Service after those 30 days constitutes agreement to those revisions of this Agreement. For any other modifications, your continued use of the Website constitutes agreement to our revisions of these Terms of Service. You can view all changes to these Terms in our [Site Policy](#) repository.

We reserve the right at any time and from time to time to modify or discontinue, temporarily or permanently, the Website (or any part of it) with or without notice.

R. Miscellaneous

1. Governing Law

Except to the extent applicable law provides otherwise, this Agreement between you and GitHub and any access to or use of the Website or the Service are governed by the federal laws of the United States of America and the laws of the State of California, without regard to conflict of law provisions. You and GitHub agree to submit to the exclusive jurisdiction and venue of the courts located in the City and County of San Francisco, California.

2. Non-Assignability

GitHub may assign or delegate these Terms of Service and/or the [GitHub Privacy Statement](#), in whole or in part, to any person or entity at any time with or without your consent, including the license grant in Section D.4. You may not assign or delegate any rights or obligations under the

Terms of Service or Privacy Statement without our prior written consent, and any unauthorized assignment and delegation by you is void.

3. Section Headings and Summaries

Throughout this Agreement, each section includes titles and brief summaries of the following terms and conditions. These section titles and brief summaries are not legally binding.

4. Severability, No Waiver, and Survival

If any part of this Agreement is held invalid or unenforceable, that portion of the Agreement will be construed to reflect the parties' original intent. The remaining portions will remain in full force and effect. Any failure on the part of GitHub to enforce any provision of this Agreement will not be considered a waiver of our right to enforce such provision. Our rights under this Agreement will survive any termination of this Agreement.

5. Amendments; Complete Agreement

This Agreement may only be modified by a written amendment signed by an authorized representative of GitHub, or by the posting by GitHub of a revised version in accordance with [Section Q. Changes to These Terms](#). These Terms of Service, together with the GitHub Privacy Statement, represent the complete and exclusive statement of the agreement between you and us. This Agreement supersedes any proposal or prior agreement oral or written, and any other communications between you and GitHub relating to the subject matter of these terms including any confidentiality or nondisclosure agreements.

6. Questions

Questions about the Terms of Service? [Contact us](#).

GitHub Copilot¹

To use GitHub Copilot, you need to install an extension to an integrated development environment (IDE) or editor. The code you write using the GitHub Copilot extension in an IDE or editor (“**Your Code**”) is not “Content” under the Agreement until you upload it to GitHub.com.

The code, functions, and other output returned to you by GitHub Copilot are called “**Suggestions.**” GitHub does not claim any rights in Suggestions, and you retain ownership of and responsibility for Your Code, including Suggestions you include in Your Code.

Acceptable Use

Your Code is subject to the GitHub [Acceptable Use Policies](#). For example, you may not prompt GitHub Copilot with content that is unlawful or otherwise prohibited by the GitHub Acceptable Use Policies on GitHub.com.

Data

GitHub Copilot (i) may, depending on your preferred telemetry settings, collect snippets of Your Code, and (ii) will collect additional usage information through the IDE or editor tied to your Account. This may include personal data, as referenced in the [GitHub Privacy Statement](#). You can learn more about the collection and use of GitHub Copilot data in the [GitHub Copilot FAQ](#).

¹ <https://docs.github.com/en/site-policy/github-terms/github-terms-for-additional-products-and-features/>.